The Lumleian Lectures
ON
CONVULSIVE SEIZURES.

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LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—There is not rarely after epileptiform seizures local temporary paralysis, and sometimes aphasia with it. For the present I speak of paralysis only. In this inquiry we have no direct concern with paralysis, temporary or permanent, owing to destruction (by clot, softening, or any other pathological process) of any part of the brain, not even if the malady set in with a convulsion.

The term "post-epileptiform paralysis" will be used to include all paralyses the immediate sequels of epileptiform seizures. I hold the hypothesis (essentially that of Todd and Alexander Robertson) that there is exhaustion of central nervous elements, including fibres of the second segment of the kinetic route, and that this is produced by the sudden and excessive discharge in the prior paroxysm. These nervous elements are exhausted, not otherwise injured, so that recuperation is prompt, and the corresponding paralysis is temporary. There is a sequence of two opposite functional states, superpositive of the first degree (*a*) in the paroxysm, and then after the paroxysm negative. But there is often more than a negative functional state in the post-epileptiform condition. We may find increased tendon reactions implying a superfunctional state of the second degree (*b*) of lowest motor centres. The duplex nature of these post-epileptic conditions must be borne well in mind.

I will now give an illustration of post-epileptiform paralysis. It may be taken to be an artificial one, but it is essentially that of a patient whose case I reported.[1]

A man, B., was *seemingly* (1) quite well when he arrived at my house after a walk of about a mile. (It is convenient to speak of this as the "first stage," not of course of the fit, but of the dramatic occurrence I am relating.) (2) (*a*) A fit began in the toes of the left foot.[2] (*b*) The whole leg was gradually involved, the spasm passing up the limb. In about eight or ten minutes the convulsion ceased, when (3) the leg was found to be (*a*) paralysed, and (*b*) there was exaggeration of its knee-jerk and clonus of the foot. (4) In six hours or less he was *seemingly* well again, certainly he was then rid of his paralysis; and next day (I did not test his tendon reactions before) his knee-jerks were normal, and there was no foot clonus. Let me consider the four acts of this drama.

(1) The patient was not really well when he arrived at my house. He had a persistent discharging lesion, presumably of a few cells of his leg centre (perhaps only of some of those of the hallux centre); so to say, he always carried it about with him, or, to speak more precisely, it was a persistent *quasi*-parasitical hyper-functionable part of himself.

(2) (*a*) The discharging lesion did function and that excessively, and possibly produced the initial spasm (of the toes) by its sole discharge; but (*b*) next, as a fulminate, by overcoming the resistance of (discharging) other cells of the leg centre it compelled these normal stable cells to discharge—compelled them to coöperate in its excess. So much for the discharges (primary and secundo-primary) of the cortex (middle motor centres). That there was a supernormal activity from cortex excessively discharging to and of the muscles of the leg convulsed is certain. The route of the numerous and rapidly succeeding nerve impulses from the hyper-physiological cortical process would be certain fibres of the corona radiata, of the internal capsule, of the crus cerebri, pons, and medulla of the right side, then of the fibres of the left lateral column (possibly also of the second and third sets of interconnecting fibres, both of which I shall ignore here) up to the anterior horns (some lowest motor centres); so far the second segment of the kinetic route is concerned. The resistance of the cells of these lowest motor centres would be overcome (secondary discharges), and the impulses (presumably increased in number) would then be of fibres of the nerve roots from those centres, thence of the continuing fibres of nerve trunks and their branches to the end plates of the muscles (third segment of the kinetic route); the resistance of the muscles would be overcome, and there would finally be great "explosive decomposition" of muscle substance (tertiary discharges).

(3) The paralysis signified exhaustion of nervous elements previously excessively functioning in the paroxysm. There would be exhaustion of cells of the cortex, not only of those of the discharging lesion, but also of those collateral stable cells which it, as a fulminate, compelled to discharge excessively. There would be exhaustion, too, of the fibres passing down from both sets of cells. The hyper-kinetic route, or at least part of it, would now be a hypo-kinetic tract. There would be exhaustion as low down as certain lowest motor centres; these centres were therefore exalted in function (second degree of superpositive functional change), hence the increased tendon reactions.

(4) The paralysis had passed off; the patient could walk well. Next day the knee-jerks were normal. There was recuperation of the exhausted nervous elements. No doubt the cells of the discharging lesion (after the fit, stable below normal) began at once by gradual morbid nutrition to re-attain high tension and very unstable equilibrium—"began to prepare for the next fit."

So far as I have seen, post-epileptiform paralysis is always most of the parts which were first and most convulsed in the preceding paroxysm, as in the case of the patient B. This correspondence is denied by some eminent physicians; further observations will settle the matter.

I think there is a relation of proportionality between the severity of the epileptiform fit (severity of the discharge) and the subsequent temporary paralysis (amount of exhaustion). I should have thought this a truism if it had not been expressly denied. It is, however, averred that whilst after the epileptiform kind of seizure there is often decided paralysis, there is not, as a matter of fact, any whatever after the severer fits of the epileptic kind. I demur to the "fact," believing that whilst after a limited epileptiform seizure there is often great *local* paralysis, loss of *many movements* of a small part of one side of the body, there is after a severe epileptic fit *widespread* paralysis, loss of *few movements* of most if not of all parts of both sides of the body. Indeed, I submit that the whole condition of bodily impotence after a severe epileptic fit is paralysis, and that, speaking generally, there is really more paralysis than is found after severe epileptiform seizures.

The relation of an epileptiform fit to the sequent paralysis, or, more exactly, the relation of the two opposite functional states, discharge and subsequent exhaustion, is not a simple relation. According to the hypothesis I hold there should always be some, however little, paralysis after an epileptiform seizure, at least some in the parts first and most convulsed, however slight the attack may have been. Trifling degrees of paralysis are easily overlooked. This deserves remark.

After a slight epileptiform seizure starting in the hand, the patient may have difficulty in picking up a pin and may yet be able to grasp strongly. There is clumsiness of movement, or perhaps some may say "loss of muscular sense." These terms must not let us overlook the fact that the slightly abnormal motor condition of the hand is a double condition, one of two opposite elements. There is in the case supposed difficulty in picking up the pin, because a few most special movements of the hand are lost (so far paralysis, negative element); the pin has to be picked up by the next most special movements remaining, which are *now* the most special of the movements (positive element); they do not serve so well as the most special would have done; hence the operation is "clumsy."

From such *quasi*-trifling paralysis as that indicated, loss of a few most special movements of the muscles of the hand, there are met with after severer epileptiform seizures beginning in the hand degrees of loss of next and next most special (or, equivalently, of the next and next more general) to loss of all movements of the muscles of it, and

[1] Medical Times and Gazette, Feb. 12th, 1881.

[2] Referring to the real case (op. cit.) the patient said that in all his seizures the first "sensation" was to the outer side of the great toe; very likely I missed a very earliest stage, one possibly of spasm limited to the ball of the big toe.

of some movements of the rest of the arm too; there is then no "clumsiness," for no movements of the hand remain to do anything.

It will be well to draw attention to resemblances and differences between post-epileptiform hemiplegia and the hemiplegia which is the result of destruction of the motor part of the internal capsule; for the moment assuming that the explanation given of the former is correct, and that the statements accepted by most physicians as to the latter are accurate, I will call the former Hemiplegia E, the latter Hemiplegia D.

First, for resemblances, taking to begin with, for comparison and contrast, *recent* Hemiplegia D. The regional (paralytic) affection is the same as in Hemiplegia E, and in each depends on a negative state of the same strand of fibres, those interconnecting the right middle motor centres and the left lowest motor centres. (I shall speak only of what I called the first set of fibres.) Now for differences. In Hemiplegia E (as in the case of the patient B.) there is exaggeration of the tendon reactions, in Hemiplegia D they are, we shall suppose, normal. Correspondingly for the negative lesions, in Hemiplegia E the negative lesion is of the whole length of the interconnecting fibres mentioned (and spoken of before as the second segment of the hyperkinetic route become a hypo-kinetic tract) up to, but not involving, the lowest motor centres. In recent Hemiplegia D the negative lesion is quite local, a breaking up of the capsular part of the interconnecting fibres; the rest of the segment, its whole extent below the capsular break, being normal.

Now for *old* cases of Hemiplegia D. In these there are increased tendon reactions. In them a negative lesion secondary to the capsular one has been established; there is then a negative state (destruction) of the fibres (lateral sclerosis) below, and added on to, the local capsular lesion;[3] that is to say, in the case of Hemiplegia E there is established at once the state of things which only occurs late in Hemiplegia D. So long as the exhaustion lasts (so long as the central kinetic route is hypo-kinetic) in Hemiplegia E, the situation is the same as in old cases of Hemiplegia D; it is the same for the time being whether the nervous elements in question are functionally dead, as in the former, or actually dead (broken up and wasted away), as in the latter.

In a popular use of the word "cause," these negative conditions may be said to cause the increased tendon reactions, just as, popularly speaking, opening flood-gates is said to cause water to flow. But using the word cause properly, it is an impossibility that the negative functional state in either Hemiplegia E or D can cause anything; a nothing cannot cause the something, the superpositive condition for exaggeration of the knee-jerks.

It is agreed upon that the increased tendon reactions in cases of hemiplegia depend on exalted "excitability" (a superpositive functional state) of nervous elements of some anterior horns. There are different hypotheses as to the process by which that exaltation is produced, and thus as to the exact state of the cells of the anterior horns concerned. Two questions may be asked: Is the abnormal condition of the cells the result of any pathological process involving the horns themselves? Or, are the cells healthy and only in greater activity? I reply to the first question negatively, and to the second affirmatively.

I take for further consideration an old case of Hemiplegia D, one in which lateral sclerosis is established. And now I consider rigidity as well as increase of the knee-jerk (limiting illustration to that one tendon reaction), both of which superpositive phenomena it is agreed upon imply exaltation of function of cells of anterior horns. One hypothesis as to the production of exaltation of function of the anterior horns (some of the lowest motor centres) is that the same process which leads to destruction of fibres of the lateral column produces, when come to the horns with which they are in physiological union, increased "excitability" of their cells; the same process, on this hypothesis, produces loss of function (destruction) of fibres and its physiological opposite superfunction of cells.

This hypothesis cannot apply to Hemiplegia E; in this case it is not likely that there are caused by the excessive discharge a negative state of fibres, and a superpositive one (excess of the normal) of cells. All the more that after some epileptic fits there is found exaltation of the knee-jerk, and after others loss of it; differences, explainable on differences, in the severity of the discharge in the paroxysm, and on the different "depths" of exhaustion after it; there is a negative functional state in both, but lower down in the kinetic route, of cells of anterior horns, when the knee-jerks are absent.

My hypothesis is that both in Hemiplegia E and in *old* cases of Hemiplegia D the cells of the anterior horns are healthy. They are, I submit, untouched by the pathological process causing the lateral sclerosis or by any other, and they are simply over-active, partly from loss of control, and partly from non-antagonised cerebellar influx (second degree (*b*) of superpositive functional change). But I do not state the hypothesis of loss of control as I used to do. There is sometimes exaggeration of the knee-jerk in recent cases of hemiplegia, and this may be owing to sudden loss of cerebral (middle motor centres) control. I shall, however, speak as if the current opinions were correct—that both the increased tendon reactions and rigidity "wait for" the descending degeneration in cases of Hemiplegia D. I now adopt an hypothesis put forward by Gowers, which is to the effect that close upon the anterior horns there are small inhibitory centres, the anterior horns being, in his nomenclature, "muscle centres."

In cases of recent Hemiplegia D, before the degeneration in the lateral column, these local inhibitory centres are intact, and the knee-jerks are not exaggerated. But I suggest that in such cases of Hemiplegia E, as that of the patient B., they are exhausted, as well as are fibres of the lateral column; after those epileptic fits, when the knee-jerks are lost, both the inhibitory centres and the muscle centres are exhausted. Now, taking old cases of Hemiplegia D, and dealing with rigidity as well as with the exaggerated knee-jerk, I would say that the "descending" process, when it reaches the anterior horns, destroys the small local inhibitory centres; the anterior horn proper, "the muscle centre" now bereft of its inhibitory centre, is uncontrolled. The cells of the "muscle centres" are not invaded by any pathological process; they are healthy, but yet over-active from loss of control. This hypothesis as to old cases of Hemiplegia D invokes but one mode of action—destruction. That hypothesis brings the facts of Hemiplegia E into harmony with those of long-standing cases of Hemiplegia D; it accounts for the absence of increased tendon reactions in recent cases of Hemiplegia D. Certainly cases of Hemiplegia E have to be considered as well as cases of recent and old Hemiplegia D in all hypotheses as to the nature of increase of the knee-jerk in cases of brain disease.

In some cases of epileptiform seizures at, or close upon, their onset, there is loss, or at least defect, of speech with very little local spasm. (We have, of course, no concern in this inquiry with any cases of le petit mal.) I shall, however, speak only of temporary abnormal affections of speech, not in, but after the paroxysms—of what is present when all convulsion is over.[4] I explain post-epileptiform defects of speech in the same way as I did post-epileptiform paralyses, supposing there to be in the former exhaustion of nervous arrangements of "Broca's region." Temporary defect of speech after epileptiform seizures beginning in the (1) right hand, or (2) right side of face or tongue, or both, is not rare.

I have not observed post-epileptiform *loss of* speech, but only defect of speech ("partial aphasia"). I shall use the term Defect of Speech E, or Partial Aphasia E. The term "defect of speech" is equivocal, as is also the term "partial aphasia"; it really covers two opposite elements, negatively loss of some speech, and positively retention of the rest of speech.[5] The patient gets words out clearly and may

[3] Sherrington has traced the "descending wasting" in the lateral column of the cord of the monkey as low as the coccygeal nerve roots.

[4] "There is a peculiar class of cases of epileptic hemiplegia in which the exciting cause of the epileptic fit at the same time damages or greatly injures voluntary power and speech." (Todd, Nervous Diseases, lecture xv.)

[5] My present concern with aphasia is only a very limited one. I need not always supply the obvious qualifications to statements made in the text. The expressions "loss of some speech" and "retention of the rest of speech" must not be taken literally, as if they meant that the patient had lost certain words or propositions of the (his) English language altogether and had retained the rest of them intact. Such is an impossible condition of things when an aphasic patient corrects his mistakes. But the statements may be taken literally for the mere purpose of a limited illustration. I do not suppose that there are fixed nervous arrangements—some for these words or syllables (properly movements corresponding to syllables) only and some for those only. I would, rather than hold this mechanical doctrine, go to the other extreme, and say that there are no nervous arrangements for movements in any centres except at the time when these and those motor nervous elements are functioning together in a particular temporary grouping.

even get out simple appropriate replies, such as "Very well," and may answer correctly by "Yes" or "No," or both. This is the positive element: it is the inferior speech to which the patient is reduced. But he is *not* able to reply correctly except by "Yes" and "No," and by other simple and very general expressions; he is *not* able to converse properly on simple subjects; he is *unable* to explain anything at all complex. These statements give the negative element: the speech lost. It is of extreme importance to distinguish the two opposite elements of the symptomatic condition. It is plainly impossible that the post-epileptiform exhaustion (*vide supra*), which I suppose there is of part of Broca's region, can answer to the patient's utterances—to the positive element: that negative functional state of nervous elements of the region answers to the patient's loss of some speech. His utterances, positive element, however inferior as speech, answer to activities of nervous arrangement of Broca's region which are healthy—which are in all ways normal except possibly for slight "loss of control."

We must bear well in mind that speech is a psychical process. Nowhere is it more important to distinguish the psychical from the physical. In the case of Defect of Speech E our ultimate concern is with the two opposite functional states of motor elements of Broca's region, which answer respectively to the two opposite psychical elements of the double symptomatic condition, which is unfortunately named (defect of speech or partial aphasia) after the negative element only. The motor elements alone of the sensori-motor substrata of speech are damaged. I submit that in Defect of Speech E there is *correlative with* its negative psychical element exhaustion of some nervous arrangements of Broca's region, which is productive of loss of some of the complex movements of the muscles of the tongue, &c. ("articulatory muscles"). And I submit that the speech remaining possible is correlative with integrity of other nervous arrangements of that same region for other complex movements of the same muscles; these healthy nervous arrangements function during the inferior speech remaining possible to the patient, and produce the corresponding articulatory movements. I have now to support the conclusion that the inferred exhaustion of some elements of Broca's region in Defect of Speech E produces paralysis in the sense of loss of complex movements of the tongue &c.

There is often with Defect of Speech E some temporary decided paralysis of (loss of many movements of) the right arm. This statement, however, although allowable clinically, is not a scientific one. We should not, in a realistic inquiry, group together a psychical symptom and a physical one as if, when so considered, they were symptoms of the same order. In harmony with what I have said, the things really comparable are respectively loss of some complex movements of the muscles of the tongue &c. (corresponding to the negative element in the defect of speech), and loss of some complex movements of the muscles of the arm (in both of movements represented by the middle motor centres). In this sense the two coexisting things are paralyses. On this basis alone is their concurrence intelligible and their comparison and contrast possible. With regard to the defect of speech, it is to be vividly kept in mind that the fellow-part of the right middle motor centres (centres of the left half of the brain) for other complex movements of the muscles of the tongue &c., and that the right and left lowest (bulbar) motor centres for simplest movements of those muscles are intact.

It will be well in further exposition to stop speaking of Defect of Speech E, and to take in illustration a simpler (although much more serious) case, one of *loss* of speech ("complete aphasia") from a destructive lesion—say, from softening of Broca's region. I shall suppose, however, that there is retention of "Yes" and "No."[6] Here the negative element is loss of nearly all speech; the positive element being retention of "Yes" and "No" only. I shall call this case Loss of Speech D, or Complete Aphasia D; but the word loss is to be taken as qualified by "except for retention of 'Yes' and 'No.'" We shall suppose there to be, as there nearly always is, right hemiplegia.

To say that the patient Aphasia D is speechless because he has lost the memory of words is to give no explanation of his inability to speak, any more than it is an explanation of the paralysis of his right arm and leg to say that it is owing to loss of volition. A part of the patient's brain has disappeared, probably the hinder part of the lowermost (left) frontal convolution (and no doubt more brain adjacent) has been changed to diffluent stuff which is brain no longer; we shall speak of this as "destruction of Broca's region." I repeat that the lesion causes paralysis. I admit that there is no disability in the muscles of the tongue, palate, lips, &c., in their commonplace services, as in eating, drinking, swallowing, &c.; I admit it readily, because I only mean that there is loss of the complex articulatory movements of those muscles. There is nothing discoverably wrong with these muscles except for the slight facial and lingual paralysis which is a part of hemiplegia, right or left. The case illustrates that we may have loss of some *movements* of certain *muscles* without discoverable disability of those muscles. The seeming paradox in the particular case under remark is easily explained by Broadbent's well-known hypothesis.

In our speechless patient not only are the lowest motor centres of *both* halves of the bulbar part of the lowest level for simplest movements of the muscles of the tongue &c. intact, but also, what is most important, complex movements of these muscles of both sides remain represented in the right half of the brain middle motor centres. Hence, on account of those remaining representations, there is no obvious disability of the muscles of the tongue &c. in their commonplace services. Taking the simple representation by the lowest level for granted, the assumption is that the muscles of both sides of the tongue, palate, lips, &c., are represented by complex movements in each half of the brain, though no doubt more specially in Broca's region than in the fellow-region of the right. Here is an exemplification of Broadbent's hypothesis.

So far am I from comparing loss of speech, considered as a negative psychical symptom, with the physical symptoms of bulbar paralysis, that I urge that there is not even a basis for any reasonable contrast of the two—psychical symptoms and physical symptoms are "not on the same platform." Regarding the physical conditions correlative with the aphasia and the case of bulbar paralysis, the cases are alike in that there is in each loss of movements of the same muscles; on this basis I urge their resemblance as cases of paralysis. At the very same time I urge the differences between loss of complex movements of the tongue &c. represented by certain *middle* centres of but *one* half (left) of the brain in cases of Loss of Speech D, and loss of simplest movements of those parts represented by certain *lowest* (bulbar) centres of *both* halves of the lowest level in cases of bulbar paralysis.

Moreover, the part destroyed in the case of aphasia is motor; no one denies since the researches of Hitzig and Ferrier that the homologous part in lower animals is motor. Hence there is nothing for destruction of it to produce in these animals except paralysis. Mark that although destruction of that part of the "motor region" on the left in man produces no disability of the muscles of the tongue &c. of either side (beyond the slight right facial and lingual paralysis spoken of as part of hemiplegia), discharge of that part develops movements of these muscles of *both* sides; by subagency, of course, of certain lowest motor centres of both halves of the lowest level—develops a contention of complex and of simplest movements of those muscles. From discharge of the part on the left are revealed the movements the loss of which, upon destruction of that part, is masked by compensation by the fellow-part of the right half of the brain. Yet there may be discharge (impulses passing by route of the callosal fibres) of the fellow-part on the right consequent on the primary discharge of the left. I mention again that Sherrington has traced degenerated fibres from a unilateral lesion of the lower end of the fissure of Rolando into both halves of the pons and medulla.

Hence I conclude that the patient hemiplegic and speechless (aphasic) has not only lost very many complex movements of the muscles of the right arm and leg, but that he has also lost many complex movements of muscles of both sides of the tongue, lips, &c.; the conclusion is, that his whole physical condition is, and is nothing else than, paralysis *in the sense of loss of movements*.

[6] To speak is not merely to utter words, but *to propositionise*. The patient spoken of in the text, although not absolutely speechless, is so, except that he has only the use of the two most general of all propositions; I say "the use of," supposing that in the case taken for illustration the patient can assent and dissent by them. If he only uttered them at random, or if they were only signs of emotion, they would not serve propositionally, they would then be of no speech value.

The condition is fundamentally the same in the Defect of Speech E, but the negative element (loss of some speech) is less, and the positive element (retention of much speech) is greater. Here, again, it will be well to illustrate by the case of a destructive lesion (a much smaller one than that in Loss of Speech D), by softening, destroying but little of Broca's region; I will call this case Defect of Speech D. There is not rarely from such a pathological process a condition essentially like that in some cases of Defect of Speech E. Let us suppose that in the case of Defect of Speech D, the patient frequently makes mistakes when he talks, either by using wrong words or by being reduced to very "automatic" utterances, such as "Very well," or that he often uses roundabout expressions, such as "It won't come out here" (which, eked out by appropriate pantomime, meant "I can't make water"). And yet, to simplify exposition, I will take the patient's saying "hat" for "carpet" only, that to be a sample of the whole of his condition. Here we see the necessity of distinguishing the two elements, negative and positive. It is certain that the softened brain (really what is brain no longer; there is a hole filled with detritus of nervous elements) cannot be the cause of the patient's saying "hat"; that is, the speech left, and is owing to activity of the part of Broca's region which remains perfectly healthy. This, his positive condition in speech, is sampled by his saying "hat." His negative condition is alone owing to "disease," and is sampled by his inability to say "carpet."

The negative element in Defect of Speech D is a minor degree of that in Loss of Speech D, the positive element is a major degree of the positive element ("Yes" and "No" only) in Loss of Speech D; in the former the dissolution of Broca's region is shallow and the level of evolution high, whilst in the latter the dissolution is very deep and the level of evolution very low, if there be any in that region. The two cases differ in double degree. In the Defect of Speech D there is much speech left, and there are very many mistakes; in the Loss of Speech D there is very little speech left, and there are no mistakes, the patient correctly assenting to and dissenting from (by "Yes" and "No") all statements made to him.

Now for the physical condition in Defect of Speech D. Answering to the slight negative element, there is loss of but a few complex articulatory movements represented in Broca's region; answering to the positive element, there is retention of many other such movements; or, we may say, limiting illustration to the samples, there is loss of the complex movements answering to inability to say "carpet," and retention of the complex movement answering to saying "hat." If anyone says that a word (properly a syllable) is not a movement he is agreeing with me; for I am contending that activity of nervous arrangements representing certain complex movements (with, of course, corresponding impressions) of the tongue &c. is only the anatomico-physiological process going on during the appearance of what are the psychical things—words. I need only say that the softening in Defect of Speech D is the negative lesion equivalent to the exhaustion in Defect of Speech E. The utterances both in Defect of Speech E and D are the outcome of activities of perfectly healthy nervous arrangements. The negative lesion in both is dissolution; in each the speech, however imperfect, as certainly signifies evolution going on on a lower level, as the speech of healthy persons does evolution going on on the normal level.

BRISTOL GENERAL HOSPITAL.—At a meeting of the governors of this hospital held on the 26th ult., the rules relating to hospital appointments were under consideration. The chairman (Mr. W. Proctor Baker) pointed out that, since the governors were not themselves competent to test the candidates, they recommend the adoption of the very highest standard of all public examining bodies as the criterion for their hospital appointments, and they asked that candidates who had not passed such an examination should be willing to undertake it within twelve months of their election. From the number of candidates applying for these appointments, there seemed no reason now to make the entry into these positions easier than in the past. A suggestion that the movement was directed against some nationality had gone abroad; but that was not so, as anyone could offer himself as a candidate if he chose to take the higher examination, which the chairman was informed presented no difficulty to a really capable man.

Clinical Lecture

ON

CONGENITAL SACCULATIONS AND CYSTIC DILATATIONS OF VEINS.

Delivered at St. George's Hospital Medical School,

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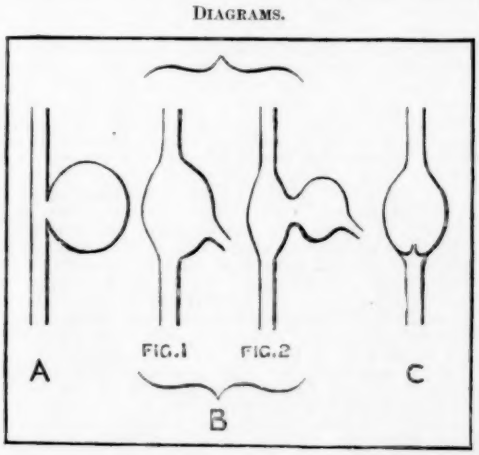
GENTLEMEN,—Although cystic dilatations and sacculations of veins have from ancient times been generally recognised in connexion with varicose disease, they have received very little attention as distinct affections up to the present time, as a reference to the literature of the subject will show. That such should be the case is at first sight perhaps a little remarkable, seeing the vast amount of labour which has been expended upon the subject of arterial dilatation in the form of aneurysm. Practically, however, this is merely the necessary outcome of the fact that, whilst arterial aneurysm is a condition always fraught with serious consequences to the patient, dilatations and sacculations of veins do not much attract, as a rule, the attention of either the patient or the surgeon, partly because they frequently give rise to no trouble of any kind, and partly because when symptoms calling for treatment arise in connexion with them, their existence is masked by the general varicosity which in many cases coexists. Moreover, the effect of traumatism, instead of tending to dilatation as in the case of arteries, is to produce in veins temporary or permanent obliteration; for although blood cysts are met with as the result of the escape of blood from the lacerated veins into the surrounding tissues, they have little or nothing in common with any form of traumatic aneurysm. In two instances only have I seen anything approaching in character to traumatic venous aneurysm. These were cases of blood cysts in the hand. One of the patients was a carpenter, the other a carpet layer. In each case the tumour was situated over the ball of the right thumb, and was not of large size. The swelling in both instances came very gradually, having existed for at least six months. In one of the cases the tumour contained fluid blood, which lay in a kind of sac formed by the surrounding connective tissue, clearly seen to be communicating with a vein which was quite patent. In the other instance the cyst, after having steadily increased without much inconvenience, became inflamed, suppurated, and was laid open under the impression that it was an ordinary abscess. It contained a little pus, but was for the most part packed with recent blood-clot. It seemed to me that these cysts were produced by the continually recurring blows &c. to which the parts were exposed by reason of the occupation of the patients. As I have already said, very little trouble arises, in the majority of instances, from these dilatations, as independent affections; nevertheless, symptoms which call for active interference are produced by them in a sufficient number of cases to render their consideration profitable. The principal varieties of venous sacs and dilatations may be seen at a glance by referring to the accompanying diagrams, which are intended to indicate the three classes of the affection met with. Each of these I propose to consider in detail.

I.—CONGENITAL VENOUS SACCULATION. (DIAGRAM A.)

This is the rarest form of dilatation, and consists essentially of a distinct sac springing from one side of a vein, with which it communicates through a small opening. The vessel to which it is attached is not necessarily dilated, varicose, or in any way abnormal. In the cases, however, which I have seen, the vein implicated has, if not varicose, been somewhat larger throughout than the corresponding vein on the opposite side of the body; although the difference in size has not been greater than is frequently seen in ordinary subjects, especially about the neck, where the veins of the two sides, very commonly, differ in calibre. The condition may, or may not, be associated with varicosity in the immediately surrounding veins; but there always exists, I believe, evidence of venous abnormality

in the affected subject, in the form of nævus or varix, in near or distant parts. Although varicosity or dilatation of the vessel from which the saccule springs is not a necessary accompaniment, it may of course coexist, especially in parts (e.g., the lower limbs) where varix is common. In its typical, uncomplicated form this sacculation, which is purely a congenital malformation, is undoubtedly rare, but it is seen occasionally in the neck, where it can be easily demonstrated when it exists, springing from the external jugular vein. It also occurs in connexion with the internal saphena, and I have seen one instance in which the saccule was connected with a large vein just below the umbilicus. Clinically the affection presents itself in the form of a softish compressible tumour, which has been known by the patient to have existed from childhood or which has been discovered accidentally, lying over or by the side of a subcutaneous vein, with which its connexion can readily be made out by compressing the vein on the proximal side of the tumour, which will cause the saccule to become distended, the vein at the same time becoming full. If the tumour happens to lie to one or the other side of the implicated vein, its connexion with the vessel is easily demonstrated; if, however, the sac lies over the vein, this connexion is not so easily seen, but may be made evident by turning the tumour over to the side. One symptom peculiar to cases occurring in the neck is the power possessed by the patient of causing the tumour to become large and tense by "holding the breath." This fact sometimes leads to the erroneous

DIAGRAMS.



assumption that the swelling can be distended with air. At the Pathological Society on Dec. 3rd, 1889, Mr. Golding-Bird showed an admirable example of this form of the affection which had been removed, together with a small portion of the external jugular vein from which it sprang. The sac, which was filled with hard clot, was as large as a billiard ball. The preparation was one of great interest, and in the matter of size is probably unique as a morbid specimen.

The following are good clinical examples of this condition:—

CASE 1.—This patient, a little girl nearly five years old, was being examined on account of a nævus on the chest, when a small, flattened, softish tumour was noticed over the middle of the left sterno-mastoid muscle, close to the outer side of the external jugular vein, with which it was pretty obviously connected. During laughter, crying, or much exertion this swelling increased in size, became rather tense, and assumed a purplish colour, the vein by its side becoming at the same time full and large. I saw this patient at intervals for eight or nine years, during which the tumour grew with the child, and gave no trouble of any kind. When the patient was at rest and the breathing tranquil it was hardly perceptible, but during excitement or if the respiration was interrupted it rapidly increased to the size of a large cherry, the vein by its side being always quite distinct.

CASE 2.—A man, forty-one years of age, applied as an out-patient at St. George's Hospital on account of some greatly dilated veins over the lower part of the abdominal parietes. He stated that he was otherwise sound in all respects, excepting that he had a swelling in the neck which was "of no account," as it had existed all his life, and had never given him any pain or inconvenience. Upon examination there was found over the right sterno-mastoid, rather above its middle, a soft compressible swelling partly overlapping the external jugular vein. By compressing the vein on the proximal side the tumour could be made much more prominent, and could be rendered still more tense by the patient if he "held his breath," when he believed he could "blow the lump up." With the distension of the tumour the external jugular vein became much swollen, and the connexion between the two structures was fairly manifest towards the outer side of the vein. The largest size attainable by any means seemed to be nearly equal to that of a Tangerine orange. This patient came to be examined several times during the years 1885-6-7, but I have now been unable to ascertain his whereabouts.

CASE 3.—This is of a different kind and illustrates one of the methods by which the condition may give rise to trouble. An over-fed butcher boy, eighteen years old, came under my care as an out-patient in February, 1887, in consequence of a painful swelling which he said had suddenly appeared in his right thigh a few weeks before. Three days prior to his applying for treatment he struck this swelling accidentally, whereupon it rapidly increased in size, became very red, and was extremely tender. On the inner side of the right thigh was found what appeared to be a phlegmonous abscess. An incision was at once made which laid open a cavity which contained superficially a small quantity of grumous pus, but was for the most part packed with blood clot. The walls of the cavity were smooth, and at the deeper part shining. Upon turning out the whole of the clot, there was seen at the deepest part of the sac a small funnel-like process, which opened into a vein as large as the saphena, which lay beneath. On the chest near the left nipple was a scar, obviously resulting from the cure of an old nævus. The veins of the right leg were slightly varicose. This was, I think, clearly a case in which a venous sacculation had become packed with clot, which had commenced to break down in consequence of the injury.

CASE 4.—This is another instance in which treatment was called for; it also seems to show that these saccules, instead of lying directly in contact with the vein involved (as in Diagram A), may be connected to the vessel by means of a stalk-like process. In July, 1885, a young woman twenty-three years old was admitted into St. George's Hospital on account of some pain and œdema of the left leg, due apparently to slight varicosity. She also complained of pain in the thigh, attributed to the existence of a hard lump which, she thought, had appeared suddenly two or three years before. The tumour, which was situated just below the apex of Scarpa's triangle, was of the size and shape of a large acorn. It could be rolled about under the skin very freely, and had all the characteristics of a fibroma, which it was therefore diagnosed to be. On removal, the tumour proved to be anchored, by means of a thin stalk, to a large vein on the front of the thigh. This stalk, when divided, bled sufficiently freely to require a ligature. The little mass, when laid open, was found to be merely a thin-walled pouch, full of partly organised blood-clot. The only opening into this sac was through the stalk by which it had been connected to the vein mentioned. This is the only case of the kind that I have met with, and the specimen was, I regret to say, not preserved.

II.—CYSTIC DILATATION AT THE POINT OF ENTRY OF A TRIBUTARY VEIN INTO THE PARENT TRUNK, CONVENIENTLY CALLED "JUNCTION DILATATION."

This condition consists of a dilatation at the situation just indicated, which involves both the parent vessel and the terminal portion of the tributary. It is met with in two forms (Diagram B). In the first of these (Fig. 1) the proximal end of the tributary and the neighbouring part of the recipient vein are about equally involved. In the second form (Fig. 2) the dilatation affects the tributary for the most part, a well-marked globular swelling being thus produced, which seems to project from the main vessel. These varieties appear almost invariably to be associated with varicosity of the veins immediately around. The

tendency to this dilatation seems undoubtedly to be congenital, whilst its development and increase appear to depend upon the same conditions which promote the development of ordinary varicosity. Hence the growth of the two affections, when they coexist, is simultaneous and proportionate. The most important examples of this form of dilatation are afforded by the subfacial (Diagram B, Fig. 1) and subcutaneous (Fig. 2) forms of circumscribed varix at the saphenous opening, which I have described in THE LANCET (June 8th, 1889, p. 1124). It occurs also in the trunk of the internal saphena when varicose or dilated, and in other parts when varix exists. In children, judging from the following case, this form of dilatation may dwindle and finally disappear. A child nine months old had two nævi on the abdominal wall, which were treated by ligature. Just above the right clavicle towards the point of the shoulder was a soft, very compressible, purplish swelling, into which there ran two rather large veins, one from above and one from the inner side; whilst leaving its lower margin was a larger vein, which ran down to the axillary region. From the feel and general behaviour of the little tumour, it was quite clear (for the child happened to be very thin) that it was a venous cyst, and not merely another nævus. The swelling gradually diminished spontaneously, and in three months had entirely disappeared, nothing remaining to indicate its previous existence excepting three rather full veins, which seemed to run together at the place formerly occupied by the tumour. Had the condition shown signs of increase or in any way appeared likely to give trouble, I should have dissected the dilatation out.

III.—LOCAL DILATATION INVOLVING AT THE AFFECTED POINT THE WHOLE CIRCUMFERENCE OF A VEIN WHICH MAY OR MAY NOT BE VARICOSE IN PART OR THROUGHOUT. (DIAGRAM C.)

This, the most common form of venous dilatation, is sometimes met with in the external jugular, is frequent in the internal saphena, and may occur in any valved vein. The dilatation invariably involves the portion of the vein in the immediate neighbourhood of a valve which generally forms the distal boundary of the tumour. When small it is pear-like in shape, the base being directed towards the valve, and is, in fact, merely an exaggeration of the natural bulging of the vein at this situation. When larger the tumour becomes spherical. It rarely attains any great size; the largest which I have seen was nearly three-quarters of an inch in diameter. In old age this form of dilatation tends to diminish in size spontaneously, probably in consequence of the valves with which it is in relation becoming incompetent. Although cystic dilatations of this kind are common in connexion with extensive varix, they occur by no means so frequently in the midst of masses of varicose veins as is sometimes supposed. It is true that the calibres of the veins in varix differ greatly in different parts of the same vessel, thus producing the appearance of a number of fusiform dilatations; but the existence in such veins of a dilatation or sacculation sufficiently abrupt and spherical to form a well-marked tumour is quite exceptional. The rounded swellings felt under the skin in these cases are generally due to a sudden bend in the course of a vein; whilst some of the larger and more projecting tumours, which are almost, to the touch, indistinguishable from cysts, may be produced by the bend in one vein embracing another vessel which crosses its concave aspect.

TREATMENT.

The only conditions which are likely to render active treatment necessary are the following:—1. Rapid increase in size or over-distension, giving rise to pain and possibly tending to hæmorrhage from the giving way of the thinned cyst wall. 2. Rapid coagulation in the sac, occurring either spontaneously, from injury, or in consequence of the extension of inflammation from surrounding parts. 3. Inflammation and suppuration in dilatations packed with clot. In the congenital form of sacculation, especially when occurring in the neck, coagulation in the sac calls for urgent treatment, as, although no pain or inconvenience need follow, a tumour is produced, which is not only unsightly, but is also liable to injury, with the risk of consequent inflammation or suppuration. The rational treatment, therefore, is the removal of the clot-packed sac, together with the portion of the vein from which it springs—a simple operation which, should be without risk in appropriate cases if practised with ordinary antiseptic precautions. In connexion with the removal of these sacculations, it is of course obvious that if the saccule springs from a large or important deep vein—such as the femoral, for instance—it is not amenable to operative treatment, unless by chance it is pedunculated sufficiently to allow of the pedicle being divided and ligatured with safety. It is equally clear that no attempt to remove the sacculations which spring abruptly (without pedicle) from subcutaneous veins is justifiable, unless the tumour is situated at a sufficient distance from the point of entry of the implicated vein into the deep vessel to make the application of a ligature to the superficial vein on the proximal side of the sac an easy and safe proceeding. It is quite conceivable, especially in women, that the mere existence in the neck of this condition may be a sufficient reason for operative interference if the tumour is large enough to attract attention, although coagulation may not have occurred or any other inconvenience have arisen. Under such circumstances, if the attachment of the saccule to a superficial vein is too near its termination to allow of removal, a considerable diminution in the prominence of the tumour could almost certainly be obtained by division of the implicated vein between two ligatures on the distal side of the sac. When occurring in the extremities, the pain or discomfort resulting from distension or overgrowth of either variety of these venous dilatations may in the majority of cases be controlled by one of the several methods available for applying pressure in ordinary cases of varicose veins, which I have fully described elsewhere.[1]

The junction dilatations and local cystic expansions (Diagrams B and C) affecting superficial veins do not necessarily give rise, when packed with clot, to more than very temporary pain or inconvenience, and may therefore, even if coagulation has occurred, be, as a rule, safely left alone. If, however, frequent or continual pain or tendency to occasional inflammation should develop, the removal of the tumour with a short length of the affected vein is certainly the proper proceeding when the situation of the dilatation renders it practicable. Further, when, in the absence of clotting or inflammation, inconvenience or pain arises from this affection which cannot readily be controlled by pressure, removal of the cyst is a certain and in proper cases a safe "cure." At the same time, in such cases removal is not absolutely necessary, since relief can generally be also obtained, although with less certainty, by division of the vein involved between two ligatures on the distal side of the sac. This last proceeding is, as already mentioned, the only available operative treatment when the dilatation is situated at the junction of a superficial and deep vein. The best evidence of the success of this form of operation is seen in cases of venous dilatation at the saphenous opening in which the internal saphena has been divided, as I have shown in a previous number of THE LANCET (June 22nd, 1889, p. 1233). If inflammation follows upon the choking of these dilatations with clot, rest and elevation of the part, with the use of some soothing application, should of course be resorted to, with a view to obviating the chances of suppuration in the first place, and subsequently to allow the inflammation to subside sufficiently either to make surgical interference unnecessary or to allow the radical treatment to be adopted if thought proper. Should abscess form, it must be treated, it is hardly needful to say, upon ordinary principles—i.e., by free antiseptic incision, and the clearing away of all pus and clot from the sac. No bleeding need be feared, as the vein beneath is almost certain to be blocked; should a little oozing, however, occur, an aseptic compress will of course easily arrest it.

[1] Clinical Lectures on Varicose Veins.

ST. MUNGO'S COLLEGE, GLASGOW.—The winter session of this College was terminated by a meeting of the professors and students for the purpose of distributing the prizes and certificates which had been awarded during the session. It appears that the number of students in attendance at this medical school was six less than on the previous year, a circumstance which Dr. Clark (lecturer on anatomy) attributed to the removal of the Andersonian College to the western part of the town.

THE CAUSATION OF PNEUMONIA.

BY H. WALTER SYERS, M.D. CANTAB., M.R.C.P.,
PHYSICIAN TO OUT-PATIENTS, GREAT NORTHERN CENTRAL HOSPITAL.

DURING my tenure of office of medical registrar, and having at that time the opportunity of observing many cases of pneumonia, I was much impressed by the inadequacy of the generally accepted connexion between exposure to cold and this disease as cause and effect. Doubtless many others have made a similar observation. I suppose there is no fact held to be established without fear of contradiction so firmly as the origin of lobar pneumonia in exposure to cold. In, I think, all the text-books such exposure is placed first amongst the exciting causes of the disease, and until comparatively recent times this dictum has gone unquestioned. Yet I imagine the experience of most observers is opposed to this view. Although I have not the materials for statistical demonstration, I am sure that a very considerable number of cases of pneumonia occurring in people previously healthy cannot be ascribed to any exposure to cold or vicissitude of temperature. That the disease does in certain cases originate in this way I do not for a moment attempt to deny, but merely assert that cold is not by any means the only cause or the chief cause of the disease. How, then, are the cases to be explained—those, I mean, which are not due to exposure? That pneumonia (lobar) is a fever, corresponding in most respects to the acute specific fevers, is, as is well known, the opinion of many. Certainly many cases support this view. Some years ago I published details of five cases of what I believed at the time, and what I still believe, to be pneumonia. In not one of these cases was there any physical sign within the chest, yet in all the disease began acutely, without apparent cause, with rigors, high temperature, movement of the alæ nasi, labial herpes, and altered pulse-respiration ratio. In all a sudden drop in the temperature ensued on the day on which the temperature in pneumonia usually falls—in other words, there was resolution by crisis. How is it possible to explain such cases as these (which are far from being of uncommon occurrence) on the supposition that after exposure to cold the lung is inflamed, the result of such inflammation being fever, and the other symptoms of the disease. I emphasise the point that in not one of the cases could any abnormal physical sign be detected, for of course it is obvious that the objection may be urged that physical signs would have been found had they been looked for with sufficient care. The only other objection is that the patch of solid lung may have been so small or so deeply seated that no indication of its presence could be detected. It seems in the highest degree improbable, however, that such could have been the case, for had it been present the hepatised lung would almost certainly have shown itself by physical signs, at least to some extent and at some—possibly late—period of the disease. But assuming that pneumonia is occasionally a fever, a specific fever, such cases as these become intelligible. It is well known that in the acute specific fevers certain physical signs may be present, or absent, or ill-developed, the rash of scarlet fever may be of the slightest, the lacrymation of measles absent, so in the same way may it not be that the consolidation of lung in the cases under discussion may be an incident of the disease which is not necessarily or invariably present? The inadequacy of the ordinary view as to the causation of pneumonia was strikingly impressed on me by two other cases which came under my observation.

Two children, both under ten years of age, lay in adjacent beds in the same ward. They were both admitted for affections unconnected with the chest, and presenting no febrile symptoms. A few days after admission the temperature of one child (aged six) suddenly rose to 102·2°. He complained of pain in the right chest, and very shortly it became obvious both from symptoms and physical signs that he was suffering from pneumonia. He died, resolution not having taken place, ten days later. The right lung was consolidated throughout, the lower lobe being in a state of red hepatisation. Almost at the same time that this patient developed pneumonia the same disease appeared in the patient in the next bed. In this case the pneumonia affected the left upper lobe; the patient recovered. Now, in these two cases the children were confined to bed in hospital, and under such circumstances I would ask, Is it possible that the disease could have originated in any way from vicissitudes of temperature? And this question being answered in the negative, how is the disease to be explained upon the ordinary view? It seems a far more reasonable assumption that in some way not obvious the children were infected by the virus of a disease of a constitutional character, having inflammation of the lung for one of its local developments. Another case, about which there was some difference of opinion, was the following: A boy of seventeen was admitted to hospital in a condition of stupor, which had supervened on a perfectly healthy state the previous day. No cause could be assigned for the illness, but he had been exposed to a hot sun. His temperature was 104·4°, and he continued in a more or less drowsy condition with high fever and without any chest sign until the sixth day after admission, when all the signs of lung consolidation appeared in the region of the right upper lobe. It seemed to me that this case was one of lobar pneumonia, with strongly pronounced head symptoms, and this view was supported by the temperature, which soon after the physical signs appeared fell to the normal, and the patient made a good recovery. In this case, again, there was a singular absence of data by which the view could be established that the pneumonia was a local disease of the lung due to chill. The whole history of the case from its onset to its termination, the high fever preceding the appearance of the physical signs, and the complete absence of any history of exposure to cold, all lend support to the view of a general and not a local disease.

Such a case as this, without careful watching, might easily have been attributed to meningitis, a meningitis ending in recovery, which is certainly a very rare event. And it seems not improbable that many cases of so-called meningitis ending in recovery are not meningitis at all, but are cases of pneumonia with late developing or absent physical signs. Cases of high fever with delirium coming on more or less suddenly are often attributed to inflammation within the cranial cavity, whereas all the time the head symptoms are merely the result of a febrile process. Thus it is not uncommon for typhoid fever to be diagnosed as meningitis at an early period of the disease, all the symptoms (even to retraction of the abdomen as I have seen) pointing to the head as the seat of disease. If, then, it is admitted that cases of pneumonia without physical signs do occur, and assuming that, in a given case of high fever and delirium occurring in a previously healthy person, no local sign can be made out to explain the condition, instead of the diagnosis of meningitis being made, may it not be that the case is really one of the general disease, pneumonia? It is admitted that cases of meningitis ending in recovery are extremely few, and it certainly seems possible, when the tendency of other diseases to simulate this deadly malady is considered, that even the few cases referred to are in reality not meningitis. Indeed, it seems almost inconceivable that meningitis of any extent can be a disease which is recoverable, the mere fact of recovery with many leading them to alter their diagnosis. If all other causes are excluded, including pneumonia on account of the absence of physical signs of that disease, the observer must admit either that the case was one of meningitis—which is contrary to his experience and common sense—or that he is totally ignorant of the nature of the malady from which the patient has been suffering. The discovery of a bacterium having a relation to croupous pneumonia is certainly of some importance, regarding the disease as a general one. But the results obtained by the inoculation of the bacterium are not accepted by all observers, and it must be admitted that at present bacteriological investigation has not given much support to the view of lobar pneumonia being a general and not a local disease. At all events, the organism which unequivocally produces the disease or cultivation and subsequent inoculation remains to be discovered. But the same remark applies equally to scarlet fever, measles, and other diseases which are undoubtedly general diseases, so that in this connexion no adverse inferences can be drawn from the negative results of bacteriological research. May it not be that the truth lies somewhat as follows?—Different causes may produce the same effects; the rash of scarlet fever, for example, may be produced by the ingestion of belladonna. The appearances, clinical and pathological, found in lobar pneumonia occur-

ring in previously healthy people after exposure to cold may be also produced as the result of infection by a virus, and thus the apparently simple class of croupous pneumonia is really a compound of two subclasses, the relative proportion between the two being undetermined; but probably the subclass due to exposure is far smaller than is supposed.

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OBSERVATIONS ON THE PATHOLOGY OF CHRONIC LOBAR PNEUMONIA.

BY A. G. AULD, M.D.

ALTHOUGH having certain well-founded objections to the terms "chronic pneumonia" and "interstitial pneumonia," which are used at random to designate quite a variety of "fibroid" lesions of the lung, lesions which differ conspicuously in origin, in anatomical distribution, and in order of progression, I yet feel able to acquiesce in the term "chronic lobar pneumonia," which is that applied by no less an authority than Charcot[1] to the particular form of indurated lung which directly develops out of the acute inflammatory affection.

Such a sequence has been accounted rare, and even denied by some, as, for instance, Buhl; and possibly enough such denial may hold good for cases of so-called "idiopathic" pneumonia. For most of the recorded cases show the acute disease to have supervened in the course of some chronic fibroid or bronchial affection, by which in all probability it was mainly induced. Howsoever preceded, the commonly accepted view with regard to the general process, as propounded by Biermer, Broussais, Charcot, Durand-Fardel, Jürgensen, Marchand, and many others, is that the stage of red hepatisation is unduly prolonged, and takes to itself new activities, resulting in the development of fibrous[2] tissue, which gradually invades, and ultimately replaces and distorts the affected part of the lung, inclusive of its various specialised structures, *pari passu* with which change is a darkening of the transforming organ until it assumes the distinctive "iron-grey hue" defined by Addison and Andral. To this extent all is clear, but the same cannot be said of the descriptions of the minuter evolutionary phases of the inflammatory new growth which authors have variously described, frequently indeed relying more on a fallacious process of deductive reasoning than by actual observation of the serial phenomena. It is more particularly towards the elucidation of this point that the present contribution is devoted.

My first case is that of a man aged fifty, who had suffered from cough and expectoration for eight winters, took acutely ill of pneumonia, and died suddenly of cardiac thrombosis, Jan. 18th, 1889, seven days after admission to the Western Infirmary, Glasgow. Post mortem: "The right lung for two-thirds of its bulk, excluding the extreme apex and base, presented consolidation of a dark-grey colour, was considerably shrunken in this part, and firmly adherent to the pleura. The left lung was somewhat voluminous. There was enlargement and hypertrophy of the cardiac right ventricle, with several globular thrombi at its apex, and the auriculo-ventricular orifices were dilated."[3] By further examination, I found the pleura of the affected lung to be somewhat irregularly thickened, and at the root it united with the peri-bronchial and peri-vascular areolar tissues to form dense bands and membranes. The consolidated part had a zone of vesicular emphysema at its apical and basal boundaries, and the bronchi leading to it were puckered and in a state of chronic catarrh. It was smooth on section, though in the more recent parts a distinctly reddish, somewhat granular appearance was noticeable—a circumstance which Sutton,[4] Oulmont,[5] and Leyden[6] have observed. On close inspection the cut surface showed a fine mottling, being a network of whitish lines on a dark ground, intersected at intervals by comparatively thin white bands passing in from the pleura. No tubercles, abscesses, or cavities of any sort were discernible. Under the microscope it presented remarkable characters. Almost all the alveoli were, in whole or in part, occupied by globular or pyriform masses of highly vascular fibro-cellular tissue, usually quite fibrous at their immediate periphery, and either sessile or attached by one or more fibro-vascular pedicles to the walls. Not a few of these masses were individually distinct, but the majority were connected to each other by fibrous bands crossing over the walls, while others yet again coalesced to form more or less extensive fibro-cellular tracts. What of the alveolar space they had left free at their margins was occupied by degenerating epithelial cells and leucocytes, and at certain points the alveolar contents consisted solely of such cells, with somewhat similar granular corpuscles, mingled with pigmented nuclei and amorphous matter. The alveolar walls were wonderfully intact throughout, their elastic fibres being easily demonstrated by suitable reagents, but they were exceedingly vascular, and were more or less unevenly infiltrated by round and fusiform fibrous tissue elements, as were also the interlobular adventitia, the lymphatics, and the interior of the bloodvessels. Sections of the granular-looking parts above mentioned exhibited a few alveoli occupied by a fibrinous exudation, in which degenerated leucocytes were unduly frequent, being occasionally aggregated in clumps, and in which, further, were interspersed delicate proliferated epithelial cells, some of which possessed two nuclei; while the remaining alveoli with their walls contained numbers of young, deeply staining fibro-blastic cells and leucocytes, and murally-disposed epithelial cells. (See illustration.)

Chronic lobar pneumonia—first stage.

Lesions such as this, wherein the fibrinous exudation of pneumonia has undergone organisation, have been recorded by several observers. Virchow was the first to indicate such a possibility, and Orth also hinted at it.[7] Goodhart[8] describes

[1] Thèse de Paris, 1860, p. 37.

[2] I cannot recognise here the "fibroid basis substance" of some authors, which in many instances seems to be nothing else than dense fibrous tissue.

[3] Pathological Report.

[4] Med. Chir. Trans., 1865, p. 294.

[5] Progrès Méd., 1877, p. 534.

[6] Berlin. Klin. Wochen., 1870.

[7] Quoted by Marchand, *vide infra*.

[8] Trans. Path. Soc., vol. xxv., p. 33.

it under the title "acute interstitial pneumonia" in the case of the left lung of a lad aged twenty, who died on the twelfth day after admission to Guy's Hospital for the acute disease. In this case the indurated lung also contained a cavity two inches and a half in diameter, opening into the pleura. Coupland[9] succinctly describes a case in which, after a cough recurring for ten winters, pneumonia supervened, death taking place on the thirteenth day after admission to the hospital. "In many parts," he remarks, "the alveolar walls were but little altered in tenuity, but the intra-alveolar exudation products were undergoing fibrillation and organisation." In addition "numerous minute abscesses riddled the back of the lower lobe, and its upper part contained a gangrenous cavity of old date." Sutton,[10] in his paper on "Fibroid Degeneration of the Lung," has appended a drawing of the intra-alveolar growth from a subject aged twenty-six, who died in the third week after the development of acute symptoms. "The air cells in some parts were filled with a fine fibre-like tissue; in other parts the cells contained a granular matter with a definite and mostly a linear arrangement." So impressed was Dr. Sutton with the appearances that he inclines to view the process rather as an acute fibroid transformation than as the result of inflammation alone. Green[11] refers to Goodhart's cases, and has an illustrative plate. Marchand[12] has an extensive article on the subject and refers to the observations of Woronichen[13] on the phenomenon in 1868 and to those of Eppinger[14] in 1875.

I shall next briefly state the principal features of a fibroid lung, from a subject aged sixty-two, who died Feb. 5th, 1882, six weeks after his admission to the Western Infirmary, with an acute pneumonia of the right lung, the physical signs of which persisted in the lower lobe till death. Post mortem the lung was adherent both at its apex and posteriorly by dense connective tissue. Except at the apex, its substance was solid, smooth on section, very dark grey in colour, and traversed by dense fibrous bands arising from the thickened pleura.[15] Its bronchi were cylindrically dilated, and their adventitia thickened, as was likewise that of the bloodvessels, while the lymphatics were replaced by the all-pervading new growth. No cavities or tubercles were evident. The left kidney was small, granular, and contained several cysts. Microscopically, the chief objective appearance was the great and irregular thickening and distortion of the alveolar walls, by the substitution of growing fibro-cellular tissue for their normal constituents. Many of the air cells also—namely, those which were not totally obliterated—were filled by masses of this tissue projecting from the walls, to which, however, they maintained a considerable organic attachment; those not so occupied containing degenerated pigmented epithelial cells, variously sized, pale granular corpuscles, and detritus. Whilst the corium of the included bronchi was generally destroyed, I occasionally noticed the curious coincidence of the perfect preservation *in situ* of their columnar epithelium, showing the absence in this case of a previous chronic bronchial catarrh.

Now it will be readily seen that the last described indurated lung corresponds closely to the descriptions usually given by authors of induration consequent on acute pneumonia, and in respect of its intra-alveolar growths harmonises with the recorded cases of Thierfelder and Ackermann,[16] Charcot,[17] Heschl,[18] Marchand, Ziegler,[19] and several others. The question therefore arises: Wherein consists the difference in the evolution of the neoplasm in the two varieties described? The one commences, as we have seen, with organisation of the exudation; does the other begin by thickening of the alveolar walls, followed by a gradual growth into several of the alveoli? Coupland[20] is of this opinion, as he says, that "organisation of the alveolar products as distinguished from growth into the alveolus is not sufficiently recognised." No doubt, *primâ facie* this seems correct enough; but, by careful examination and consideration, I am led to the conclusion that there is no such distinction, but that both commence in the same manner—namely, by organisation of the exudation,—the second variety herein described simply representing a more advanced stage of the first. The explanation of the more advanced appearances is, no doubt, to be found in the circumstance that, as the new growth increases and becomes more fibrous in the walls, the bloodvessels therein get gradually obliterated, and, the blood-supply being thus cut off from the more slenderly attached intra-alveolar masses, they disintegrate and die—a process which seems fully borne out by the nature of the contents of many of the alveoli, as described above. More particularly examined, these contents are constantly found to consist of the following elements in varying proportion and distribution:—1. Large granular or vacuolated, rounded nucleated and non-nucleated corpuscles, some of which contain pigment granules. 2. Smaller, granular nucleated corpuscles and free nuclei. 3. Hyaline irregular plates with occasional attached nuclei. 4. Pale hyaline nucleated spindles. 5. Pieces of decayed tissue and granular detritus. The larger granular corpuscles are partly epithelial, and are partly derived from formative cells. Many authors describe them all as epithelial, but I am satisfied that such is not the case. They are the outcome of the second variety described, by overgrowth, and many contain several nuclei; in one such I counted as many as nine. In carefully prepared sections, their course from the alveolar walls may be plainly traced. They grow in the air cells for a time on what nourishment they can pick up, but soon die, becoming, in fact, transformed into Gluge's corpuscles. The epithelial cells, on the other hand, usually contain pigment granules, and may frequently be seen adherent to the walls, not as tesselated, but as cylindrical or cuboidal cells. The epithelial origin of the hyaline plates is self-evident, while the nucleated spindles and granular detritus result from the disintegration of the fibrous tissue masses originally present, the pedicles of which may sometimes be seen still adherent to the walls. And for the further support of this view, if such be necessary, the following general considerations may be adduced. First, in all the recorded cases in which organisation has been noted death has occurred very early, generally within a fortnight from the onset of the acute attack, whereas in all the others weeks, and often months, have elapsed. Secondly, fibrous masses in the alveoli are found in the recent parts of a slowly advancing fibroid induration, where there is evidence of recent localised pneumonic patches. For instance, Sir Andrew Clark, in his Lumleian Lectures[21] on the fibroid lung arising from certain primitive dry pleurisies, says in the course of his description, "The alveolar cavities are at some points occupied by a fibroid substance," preceded by the significant statement in the previous column, "in the first instance it is the subpleural alveoli which are affected, and their first mode of affection is a *croupous consolidation*, rarely a caseous." Thirdly, on what other hypothesis can the existence of fibrous masses in the air cells be explained? Fibrous tissue cannot grow in this fashion into a cavity; it is essential that there be a previous exudation of fibrinous lymph, affording a pabulum for the new formative cells, while as yet the vessels are unformed, a circumstance which, it seems to me, Hamilton does not sufficiently recognise in describing the process of the organisation of lymph. And, lastly, if the exudation be not organised to begin with, what becomes of it? It is not absorbed at first, else the lung would recover. It is being infiltrated with cellular elements, and there are no grounds for supposing that these same elements, while growing and organising in the alveolar walls, are yet destined to die in their contents. There are, therefore, strong grounds for believing that chronic lobar pneumonia invariably commences with the organisation of the croupous exudation, and the simultaneous production of growing cellular elements in all the pulmonary structures limited by the same, that the alveolar walls continue to grow and thicken, causing thereby atrophy, and ultimately total disappearance, of their proper structures, lose greatly their vascularity, until the alveolar contents are deprived of nourishment and die, bronchiectasis occurring at this stage (Fox), and that, finally, by still further retrograde changes, caseation supervenes, and not uncommonly gangrene.

As to the genetic elements of the intra-alveolar formation, and their precise mode of development, the opinions of authors are considerably at variance. Coupland says "these contents cannot be formed by outgrowths from the alveolar wall, but by exuded leucocytes," and speaks of the

9 Ibid., 1880, vol. xxx.; and THE LANCET, vol. i., 1879.
10 Med. Chir. Trans., p. 294, *et seq.*, 1865.
11 Pathology, seventh edition, p. 481.
12 Virchow's Archiv., vol. lxxxii., 1880.
13 Sitz-Bericht kk. Acad. Wiss. zu Wien, vol. lv., ii., 1868
14 Prager Vierteljahrschrift, vol. cxxv., 1875.
15 Description chiefly taken from museum specimen.
16 Deutsch. Arch. f. Klin. Med., 1872, vol. x.
17 Loc. cit. 18 Prager Vierteljahrsch., 1856, vol. ii.
19 Pathology, MacAlister's translation.
20 Loc. cit.
21 THE LANCET, vol. i. 1885, p. 602.

fibrous tissue as "forming coarse felted bundles, and not arranged in any definite order." Green, Wilks,[22] and Ziegler refer to "bud-like processes" growing out from the alveolar wall, and the appearances are certainly such. Heschl[23] considered the nuclei of the capillaries to be the genetic elements of the new growth, whilst Woronichen[24] regarded the alveolar epithelium as its source, a view which, of course, cannot now for a moment be entertained. From a most careful examination of the most recent parts, I find that there is no such thing as the tissue growing out as a "bud" from the wall. The first observable phenomenon is the exodus from the walls, and more particularly from certain points thereof, of round, deeply staining cells, indistinguishable from leucocytes, which gradually push their way into the meshes of the fibrin. Many of these, however, get vacuolated and die, or are utilised by their successors, a similar fate overtaking what proliferated epithelium and leucocytes the exudate originally contained. These cells continue to swarm forth, being mingled now with others of a similar size and outline, but presenting a well-marked large nucleus, which latter soon constitute the majority, while simultaneously from one or more points of the wall, corresponding to the insertions of the pedicles already referred to, new vessels bud forth, rapidly grow, and unite with others from neighbouring alveoli to form rich pervading plexuses. The first produced nucleated cells tend to agglomerate at the periphery, the latest formed passing *between and amongst them* to the central area of the alveolus. They rapidly grow, becoming oval and variously shaped, and many contain two nuclei by karyokinetic division. From being huddled together at first, they soon form into closely packed circular or longitudinal rows, the former at the periphery, the latter in the more central parts; their protoplasm becomes clearer and yet more granular, elongates into fibrillated spindles, which become more or less dovetailed into each other, their adherent nuclei gradually fading, until most of them can no longer be made to react with staining reagents. (See illustration.)

Such being the particular course of events by which the fibrinous exudation becomes in whole or in part organised in the several alveoli, a few considerations may now be offered as to the geneses of the formative cells. Are they originally leucocytes, according to what may be termed the Cohnheim-Ziegler theory, which grow both at the expense of others and by nuclear division, or are they derived from the fixed tissue elements, including perhaps the endothelia, as is mainly upheld by Baumgarten, Raab, Thiersch, and Waldeyer, or from both these mesoblastic derivatives? The difficulties involved are great, especially in view of the fact that the leucocytes are shed into the plasma spaces, where they get mixed up with the fixed tissue elements and the wandering cells of von Recklinghausen. The filling of the plasma canals and spaces with the inflammatory effusion has the mechanical effect of desquamating the connective tissue corpuscles from their bundles. This seems to me to be essential preparatory to their division, which we may consider to be at length prompted by an irritant of some sort contained in the exudation, possibly the fibrin ferment. Anyhow, the young connective tissue cells so produced are at first indistinguishable from leucocytes. Experimental evidence in favour of development from the latter has been forthcoming from Ziegler, Tillmanns, and others, but on the whole unsatisfactory. It is therefore evident that meantime we must be guided by more or less general considerations. With respect to the leucocytes, it indeed becomes a question what is the fate of the great numbers dislodged from the vessels, should they not become organised, if, indeed, we are warranted in assuming such a slowing of the circulation, after the subsidence of the more acute symptoms, as must account for their production. And, further, if it be granted that endothelium is capable of originating organisable cells, why not leucocytes also, which Klein[25] and others state to be in part derived from normally germinating endothelium? On the other hand, there are strong grounds for believing the fixed tissue cells to be engaged in the process. From a general point of view, it may be observed that when there is a liability to the abnormal formation of fibrous tissue in an organ, or if already slowly creeping in it, is it not rather more likely that after acute intercurrent disease, the tendency to such formation resided rather in the fixed cells than in the newly extruded leucocytes? Again, in the particular case of the bloodvessels, in the present instance nothing could be more plainly evident than the production of the organising cells in their interior from the thickened tunica intima. Well, here is an *incruent* tissue furnishing these new elements, and that quite independently of those carried in on offshoots from the vasa vasorum likewise plainly traceable, and of others passing in strings from the adventitia across to the lumen. In the face of this, it seems unreasonable to suppose that the fixed cells of the alveolar walls are not proliferating; and if so, for any other purpose than the formation of fibrous tissue.

P.S.—Since this paper was written and sent to THE LANCET, I have perused the article by Dr. Percy Kidd in last week's issue, entitled "Subacute Indurative Pneumonia." I am unable to agree with some of Dr. Kidd's clinical and pathological deductions. On the other hand, it seems to me that Dr. Kidd's cases bear out the theory propounded in this communication regarding the course of the pathological changes. And on the clinical side, in my first case there was a temperature of 103° on admission, lasting five days, when it sank to the normal, and continued so till death. In the second case the temperature on admission was 104°, and the expectoration "*very distinctly rusty*," and great deficiency of chlorides in the urine. The temperature fell to 102° on the fourth and to 99° on the fifth day, and continued at 99° till death.

Glasgow.

[22] Pathological Anatomy, p. 354. [23] Loc. cit.
[24] Loc. cit. [25] Atlas of Histology, p. 21.

ON ACUTE INTESTINAL OBSTRUCTION AND ITS TREATMENT BY ABDOMINAL SECTION, WITH ILLUSTRATIVE CASES.[1]

BY JORDAN LLOYD, M.B., F.R.C.S.,
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IT is discouraging to the busy practitioner wishing to master the subject of intestinal obstruction, on opening a standard English text-book, to find that at least thirty-four different varieties of this malady may be encountered. Few could commit their names to memory; not one of us could bear them in mind so as to serve at the bedside; but, fortunately for our patients, we may practically disregard these thirty-four pathological individualities, and still arrive at a diagnosis upon which a rational and successful treatment can be based. Intestinal obstructions may be primarily divided into three great orders: the acute, the chronic, and those where acute symptoms supervene upon chronic. I shall refer in this paper to acute cases only, and shall exclude from these those which reveal their nature to digital exploration of the rectum. My remarks will apply, therefore, to cases only where relief by lumbar colotomy cannot be entertained. Acute obstructions may be divided, according to Treves, into four classes: (1) strangulation by bands or through apertures; (2) acute volvulus; (3) acute intussusception; and (4) some forms of obstruction by foreign bodies. This division may be pathologically perfect, but it would be of much greater clinical value if the cases of strangulated intestine were not looked upon as intestinal obstructions at all, but were kept in a class by themselves, and were diagnosed and spoken of as "intestinal strangulations," for it is the strangulation of the vessels and nerves in the walls of the bowel which kills the patient, and not the obstruction to the passage of its fæcal contents; and it is to the relief of this strangulation that our efforts must be first directed rather than to merely removing from the bowel a few harmless scybala. The following case illustrates the most acute form of intestinal obstruction, or, as I prefer to call it, "acute intestinal strangulation."

CASE 1. *Acute intestinal strangulation; abdominal section within thirty-six hours of onset; gangrene of ileum; death.*—Philip S——, aged thirty-one years, was placed under my care in Queen's Hospital on March 13th, 1889, by my colleague, Dr. Drury, as a case for immediate operation. The patient was a strong, muscular man, with a previous history of splendid health. (No special record with reference to antecedent abdominal trouble.) On getting out of bed the previous morning he felt sudden

[1] A paper read before the Midland Medical Society, Dec. 4th, 1889.

sharp pain in the right side of lower abdomen, so severe that he was unable to go to work. Three hours later vomiting set in and continued through the day, ceasing at night but returning again next morning. On admission, thirty hours from the commencement of his illness, there was great prostration; pulse small, fast, and easily compressible; anxious expression; cold clammy skin, cyanosed finger tips; abdomen concave; right iliac region full and very tender; resonance everywhere; breath foul and vomit fæcal; pain paroxysmal, but less acute than the previous day; constipation absolute. His case appeared almost hopeless, but he begged that something might be done to relieve him. Ether and chloroform mixture were administered and a two-inch incision made between umbilicus and pubes. About two pints of claret-like fluid escaped, and coils of reddish, moderately distended small intestine presented. In the right iliac region purplish-black flaccid gut was found, consisting of the terminal fourteen inches of the ileum. It was tightly held by a tense band—probably omental—which ran across from the mesentery towards the cæcum. The strangled gut was so soft that it tore readily during manipulation. The central end of living bowel was brought to the skin and secured, and the gangrenous mass below left *in situ*, a large-sized glass drainage-tube being inserted down to it. The wound was only partly closed, and the patient sank four hours after the operation.

Remarks.—The rapidity of the gangrene in this case is in no way exceptional. I have seen at least half a dozen similar cases, and all have terminated fatally. The only treatment for such a condition is relief by operation within a few hours of its onset. Suddenness of origin, acuteness of pain, rapidity and severity of prostration, earliness of vomiting, and the increasing persistence of all these symptoms, point probably to intestinal strangulation, and call for immediate abdominal exploration. The site of the gangrene here is interesting—viz., the lower fourteen inches of the ileum. No post-mortem was allowed, so that the exact mechanism of the strangulation could not be ascertained. The question how best to deal with gangrenous gut in this precise situation cannot be discussed in this paper.

A general diagnosis of intestinal obstruction is arrived at by the coexistence of vomiting, constipation, and paroxysmal abdominal pain, differing in degree and having varying relations to each other in point of time and duration; but this general diagnosis is by no means sufficient, for before we can adapt a treatment to any particular case we must investigate further and determine *where* is the obstruction and *what* is its nature. But, unfortunately, whilst the general recognition of stoppage of the bowels is rarely a matter of difficulty, the exact diagnosis of the character and situation of the lesion can only occasionally be made, more especially in the acute forms of the malady. With regard to situation, it is not always possible to distinguish even between occlusion of small and of large bowel. Although as a general rule the former are characterised by acute and the latter by chronic symptoms, it every now and then happens that the converse is the case. With reference to the nature of the lesion, experience teaches us that, except in some cases of impacted fæces, foreign bodies, gall-stones, acute intussusceptions, and those obstructions which are reachable per rectum, accuracy of diagnosis is only obtainable when the lesion is actually before our eyes or between our fingers. Time does not allow me to discuss this question at greater length. I shall proceed to give short notes, therefore, of a series of successful cases which have occurred in my practice.

CASE 2. *Acute intestinal obstruction; abdominal section; enterostomy; recovery; fæcal fistula; second and third attacks relieved through unhealed opening.*—Albert P——, aged nineteen years, was sent into Queen's Hospital, under my care, by Dr. Garman of Wednesbury on Dec. 17th, 1883, as a case of acute intestinal obstruction requiring immediate operation. He had had a severe attack of "inflammation of the bowels" twelve months before. His present illness began six days ago with vomiting, abdominal pain followed twelve hours later, and bowels were moved on the day preceding the sickness. On admission, anxious expression, sunken eyes, teeth sorded, tongue dry and red, breath foul, skin dusky; pulse 98, full and strong; abdomen not distended; parietes hard as a board and tender to pressure, resonant all over except for slight dulness in right iliac region; pain severe and continuous, with colicky exacerbations; vomiting frequent and distinctly fæcal; constipation absolute. Ether was the anæsthetic given, and a one-and-three-quarter-inch median incision opened the abdomen between the pubes and umbilicus. One or two ounces of yellow serum escaped; distended and thickened coils of small bowel were seen through the wound. The sigmoid and cæcum were contracted and empty; coils of small intestine could be felt with the finger. No band or loop or hernia through an aperture could be discovered; the most easily accessible coil of distended intestine, therefore, was brought forward and stitched to the skin edges, the upper and lower angles of the wound were sutured, the bowel was then incised, and a free escape of liquid fæces followed. Next day the pain and vomiting had entirely disappeared. The bowels were relieved spontaneously on the tenth day, and from this time his recovery was uninterrupted. The opening in the bowel contracted rapidly to the size of a crow-quill, and then remained stationary. A pad and bandage worn over it prevented the escape of all intestinal contents except one or two drachms of thin biliary fluid some ten or twelve minutes after a meal had been taken. I have made several unsuccessful attempts to close this fistula. The patient returned to his work after the operation strong and well as ever. In December, 1884, he had another similar attack, which was relieved at once by getting rid of the obstructive fæcal contents by dilating the fistulous opening. In January, 1887, another attack, which was also relieved by the same procedure. He has had no trouble since then, and follows the laborious occupation of a furnaceman with as much comfort as before the commencement of his first illness.

Remarks.—This was my first successful case of abdominal section for acute intestinal obstruction, and was performed nearly six years ago. The obstruction was probably caused by looping or matting together of coils by a previous inflammation. The danger threatening the patient was due to fæcal retention rather than to any condition of the intestinal tissue itself. The indication, therefore, was to relieve the loaded bowels of their malevolent contents accumulated above the seat of obstruction, and to trust to the spontaneous restoration of the way through the parts below when matters had quietened down. The operation of enterostomy, or making an artificial anus in the most distended coil, is the quickest, simplest, and safest method of dealing with all cases which do not depend on strangulation of the bowel wall, and it is the procedure which should usually be adopted when careful exploration fails to recognise the nature of an obstruction. The fistula usually heals of its own accord, and rarely remains permanently, as in the above; and here it is fortunate that such was the case, for two subsequent attacks of acute obstruction were immediately relieved by utilising the old fistula track as a valve of escape for the obstructed contents.

CASE 3. *Acute intestinal obstruction; abdominal section; enterostomy; recovery.*—Mabel P——, aged four years, seen in consultation with Dr. Bull of Sparkhill on March 13th, 1886. Had always been a healthy child; three days before was suddenly seized with acute pain in the abdomen and vomiting; bowels not moved since. Abdomen not distended, but resonant everywhere, slight tenderness; anxious expression, sunken eyes, quick, small thready pulse, great prostration. Warm fomentations and enemata ordered. Next day, being no better, she was removed to Queen's Hospital for operation. The vomit was fæcal, the pain still present, the constipation complete, and the prostration unaltered. Chloroform and ether mixture was the anæsthetic, and the abdomen was opened between the umbilicus and pubes by a two-inch median incision. Small intestines only were seen, distended, reddened, and thickened. Both iliac fossæ were empty; the seat of obstruction could not be found; the most prominent coil of small bowel was stitched to the edge of the wound and opened. Much flatus and a little liquid fæces passed at once. Moderate shock followed the operation, and she vomited twice next day. During the next forty-eight hours there was a profuse escape of thin fæces from the wound, and on the third day the rectum began to relieve itself spontaneously, and no more trouble was experienced in this direction. On the tenth day the artificial opening was closed with a pad and strapping, and healed without further trouble. The child left the hospital at the end of the fourth week. Dr. Bull wrote me in July last to say that she had remained perfectly well ever since.

Remarks.—The precise nature of the obstruction here remains obscure. Whether due to a volvulus of small intestine or to an incarcerated loop I cannot say, but what I do know is that the child was dying, with symptoms pointing

to obstruction of the bowels, and that an operation directed to the relief of this condition was followed by an easy and uninterrupted recovery. I chose to open the bowel here because I believed at the time of the operation that there was no intestinal *strangulation* present. The rapidity and simplicity with which the fistulous opening was closed are worthy of notice, as is also the entire absence of subsequent trouble from the necessary adhesion existing between intestine and abdominal wall.

CASE 4. *Acute intestinal obstruction; abdominal section; incarcerated loop; recovery.*—Mrs. B——, aged forty-seven years, was admitted into the Birmingham Workhouse Infirmary under the care of Dr. Suckling on June 13th, 1887, complaining of paroxysmal abdominal pain, vomiting, and constipation of four days' duration. She was treated by warm fomentations, belladonna, and enemata, and was transferred to the surgical wards next day. She was very prostrate, anxious expression, sunken eyes, cold, pinched extremities; pulse fast and small, tongue dry and red; abdomen moderately distended, rather tender to pressure, resonant everywhere; pains crampy and paroxysmal; vomit fæcal; constipation absolute for five or six days. Ether and chloroform mixture was given, and the abdomen opened between the umbilicus and pubes by a two-and-a-half-inch incision. Distended coils of small intestine presented, thin walls thickened slightly, and deeply injected. Both iliac fossæ were empty. No band or adhesion or extra tense loop being found, the intestine was carefully drawn out of the peritoneal cavity and received in warm, wet, clean towels, arranged so as to form a kind of artificial peritoneum. The gut was followed towards the obstruction—that is to say, in the direction of increasing congestion. Many feet of bowel were withdrawn before a check was encountered, but at last the gut became tightly held deep down in the direction of the left side of the pelvis. A finger introduced along the taut bowel liberated an incarcerated loop from beneath a thick round band, which appeared to run from the left side of the uterus upwards and outwards to the left iliac fossa. The gut was now free again, and more could have been drawn out of the abdomen without difficulty. The obstruction being removed, the extended coils of intestine were quickly and readily returned from their protecting clothes back into the abdomen. No peritoneal toilet was carried out, and no drainage tube inserted. The wound was dusted with boracic acid and closed with five iron-wire sutures. Moderate shock followed the operation, the sickness and pain cleared off at once, and during the night flatus was passed per rectum. On the third day the bowels emptied themselves spontaneously, and the wound was soundly healed. The patient quickly made a perfect recovery so far as the abdominal trouble was concerned, but unfortunately, however, she developed symptoms of insanity, and is now, I believe, an inmate of a lunatic asylum. I saw her six months after the operation, and she had no abdominal symptoms of any kind.

Remarks.—This was the first case in which I had purposely withdrawn a long length of bowel from the peritoneal cavity in search of an obstruction, and, as the sequel showed, the procedure was successful—first, in enabling me to find the incarcerated loop; and, secondly, in relieving a dying woman of a group of critical symptoms. This patient had prolapsus uteri for many years, and possibly some band may have developed in connexion with this irregularity, under which a coil of small intestine had become incarcerated. *(To be continued.)*

NOTE ON

SUDDEN REMOVAL OF NERVE PRESSURE AS A CAUSE OF PAIN.[1]

BY EDWARD F. WELLS, M.D.,

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CASE 1.—Early in the morning of Oct. 6th, 1882, I was called to see Mrs. L——, aged twenty-six, who a few hours before had been delivered of her third child. The labour had been normal in every respect, nevertheless about two hours after its completion there arose a most excruciating pain in the right leg, which gradually ascended towards the trunk, until at the time of my arrival it was located in the upper part of the thigh. The pain was described as being continuous, expanding, and almost unbearable. The patient certainly had the appearance of being in the most intense agony. She lay near the edge of the bed, over which hung, quite to the floor, the painful limb; this member was said to have been before parturition tensely swollen, although at the time of my visit this was not marked. The limb was placed in bed and surrounded with heated flannels, with the effect of increasing her suffering, which was finally relieved by hypodermic injections of large doses of morphia or time and Nature, I am now uncertain which. At the time I attributed the symptoms to injury done the sacral plexus during parturition—how erroneously the sequel will show.

On Jan. 4th, 1884, I attended this lady in her fourth confinement. The labour was normal, rapid, and easy. The right lower extremity was again tensely swollen, and to guard against the recurrence of the pains previously experienced the limb was at once enveloped in heated woollens. However, as the second stage of labour had been so rapid and easy, I felt sure that no injurious pressure had been exerted upon the nerve trunks and that the pains would not appear. After half an hour an uneasy sensation began in the foot and gradually ascended and became more severe until the pain was of the most frightful character. Again the leg hung over the side of the bed. Morphia was administered hypodermically, but the suffering was not relieved until the patient was quite narcotised. As a matter of fact, tightly grasping the limb just above the seat of pain gave more relief than any other measure employed. She was again confined on Dec. 23rd, 1885. The conditions were in all respects similar to those present in the two confinements immediately preceding, but the pain was prevented from recurring by applying immediately after delivery a rubber bandage to the swollen limb from the toes to the pelvis, exercising care to make the upper turns somewhat tighter than the lower ones.

CASE 2.—Mrs. M——, aged thirty-two, was on Oct. 19th, 1885, confined for the fifth time. Following each of her previous labours she had suffered greatly from pain in the calf of the right leg, the limb having been in each instance greatly swollen. The pain would come on in about an hour after parturition and continue for ten or twelve hours, rapidly attaining its maximum of intensity and gradually subsiding. Allowing the limb to assume a dependent position usually gave considerable relief. The labour particularly referred to was quite normal, and the second stage was of short duration. In a little less than an hour there was manifested a sense of uneasiness in the right calf, which soon developed into actual and severe pain. At this juncture a constricting bandage was applied above the knee, which gave relief very quickly. The limb was also allowed to hang over the side of the couch. At the end of twenty-four hours the œdema had greatly subsided, and the bandage, which had become loosened, was removed.

I believe the severe pain complained of by these two women to have been caused by the rapid subsidence of the œdema and the consequent relaxation of the long-continued pressure of the nerves of the parts, and the relief afforded to have depended upon the prevention of this sudden reduction of the swelling. Indeed, Nature caused these patients to instinctively place the affected parts in a position to retard the rapid removal of the serum, by interposing the force of gravity.

Sudden removal of pressure gives rise to pain in other than puerperal cases, as, for example, after the removal from a limb of a tight bandage which has been long applied, following catheterism of a greatly distended bladder, &c., many examples of which could be introduced were it necessary.

The most interesting question connected with this subject is the suggestion that the pains experienced by chronic rheumatics and some others before storms and other violent and sudden meteorological changes may be due to rapid withdrawal of the atmospheric pressure exerted upon the body and its contained nerves. Everyone has noticed with what wonderful regularity and certainty rheumatic pains appear and increase in severity with the fall of the barometrical index, and what explanation of the phenomenon more plausible than the one here offered?

Shelbyville, Indiana, U.S.A.

[1] Read by title before the Mississippi Valley Medical Association, at Evansville, Ind., Sept. 10th, 1889.

A CASE OF

HYDROCHLORIC ACID POISONING, FATAL ON THE NINETY-FOURTH DAY.

BY PERCY J. DUNCAN, M.B. LOND., M.R.C.S., &c.

FOR permission to publish the following case I am indebted to Dr. J. Mitchell Bruce.

F. M——, railway inspector, aged thirty-seven, was brought to the Charing-cross Hospital at 11.15 A.M. on Saturday, Jan. 12th, 1889, with the following history. Having a cough he had attended at a dispensary, and had received medicine in an ordinary wine-bottle. This he accidentally left at his station. Next day the bottle was missing; but the day following a bottle was handed to him as being the lost one. This he took home, and next morning asked his wife to give him a dose of his medicine. She poured him out one, which he threw into his mouth with the intention of swallowing it quickly. He was immediately conscious from the peculiar taste and sensation that something was wrong, and rushed from the room spitting out what he had not already swallowed. He experienced burning pain in the mouth and throat, reaching down the gullet to the epigastrium. A medical man was sent for, who administered "something," and sent him at once to the hospital, where he arrived at 11.15 A.M. On the way he commenced retching and vomiting. When seen he was sitting down, with a pale, anxious face, pulse large and rapid, and hurried respiration. He had considerable thoracic and abdominal pain, and spoke in a very rapid and excited manner. He was continually straining and vomiting, bringing up small quantities of yellowish material, now for the first time mixed with blood, which was bright. The vomited matters were acid, but not strongly so. The tongue was yellowish; no staining of chin or cheeks; yellowish staining of the soft palate, arch of fauces, and back of pharynx; no loosening of teeth. He was given small quantities of solution of carbonate of sodium (one drachm to four ounces), which he swallowed readily and without pain. On getting him to bed the temperature was found below 96°. He was covered with a warmed blanket and hot bottles were applied to the feet. With the exception of further small quantities of soda solution, and a little milk and white of egg (which he took for about two hours at intervals of fifteen minutes), nothing was now administered by the mouth, nutrient enemata (peptonised) being ordered every four hours. — 7.30 P.M.: Patient has some pain in the abdomen; increased if he lies on the right side. Pulse 96, stronger and quieter; respiration 20. Since admission he has vomited five times. The first three vomits obviously contained much altered blood. The last two were very dark, alkaline, greenish-yellow in thin layers, containing bile as shown by Gmelin's test. The microscope revealed many altered blood-corpuscles, and much unrecognisable débris. The bowels have acted five times; the first stool was free and natural, the next three motions fluid and very dark, containing altered blood. The last was less fluid and not at all dark coloured. Urine high coloured, clear, acid, sp. gr. 1028, and containing a decided trace of albumen.—Jan. 13th, 1.30 A.M.: Patient sleeping quietly, no further sickness. 10.30 A.M.: Very fairly comfortable. Sick once; vomited matters as before; sediment shows fewer blood-corpuscles. Is very thirsty. Allowed small pieces of ice to suck; otherwise nothing by the mouth. Pulse 80; respiration 18.—14th: Very little pain now, and can lie on back or right side comfortably. All nutrient enemata well retained. Rather hungry; very thirsty. No further vomiting or action of bowels. Pulse 93; respiration 24. Sleeps much during the day.—15th: No pain; albuminuria disappeared.—19th: Patient pleaded hard for something in the way of food, being very hungry, but nothing was allowed.—20th: At 4 A.M. patient felt sick, and immediately afterwards brought up fourteen ounces of bright blood, which was alkaline and clotted. No pain preceded or followed the vomiting. Forty-five minutes later he brought up twenty ounces of rather darker blood, with a few shreddy particles in it. Temperature 98·4°; pulse 132, small and soft. Ordered four grains of acetate of lead in water at once, and gallic acid and opium mixture every four hours. 10.30 A.M.: Patient says he "feels all the better for it." Pulse 92, soft, but larger than before. Bowels open once since; no blood. 12.30 P.M.: Patient began to feel uneasiness in rectum. Enemata not so well retained. Fifteen minims of the tincture of opium added to each enema.—21st: No pain, no nausea. Enemata retained.—22nd, 11.20 A.M.: Hæmatemesis recurred, the patient bringing up eight ounces of rather dark blood. Pulse 148, very soft and compressible. Had been sleeping previously, and quite quiet. Ordered thirty grains of tannic acid and three grains of acetate of lead in mucilage and water every four hours.—24th: Acetate of lead cut off. Pulse 98. All enemata retained.—27th: Complains of dryness of mouth. Tongue dry, brown, and hard (tanned). All medicine cut off.—31st: Has had no symptoms whatever for seven days.—Feb. 1st: From this date gradual administration of food by the mouth was commenced by giving one drachm of peptonised milk every half hour. No pain; no nausea.—2nd: Three drachms of peptonised milk every half hour.—3rd: Unpeptonised milk substituted.—4th: Half an ounce of milk every half hour. Small slice of thin bread-and-butter at meal times. Nutrient enemata reduced to four times daily.—5th: Takes one pint and a half of milk during the day. Bread-and-butter and milk pudding. Enemata three times daily. — 6th: Enemata discontinued. Milk two pints, beef-tea one pint, bread-and-butter, milk pudding.—8th: Fish and one egg added.—13th. Full diet substituted. After being five days on full diet without any symptoms, abdominal or otherwise, and being apparently cured of all trouble, the patient left the hospital in the best of health and spirits. To use his own words, he "felt as well as he did before taking the acid." Some few days afterwards I saw him when he came to the hospital to visit a friend, when he said that he was quite well, but that his wife said he ate too much.

On March 15th the patient was seen by Dr. Bruce, in consultation with his medical adviser. He had recently been vomiting daily, bringing up large quantities of a fluid matter depositing a dark sediment, without any accompanying pain. Physical examination of the abdomen showed that in dorsal recumbency there was visible and palpable prominence in the epigastric, umbilical, and corresponding lateral regions, reaching down to the umbilicus in the middle line, and just below its level on the right. This area was resonant, and over it vermicular movements were plainly visible. Succussion elicited distinct splashing. In the erect posture the resonant area almost entirely disappeared.

He re-entered the hospital on April 1st. (For the notes from this point onwards I am indebted to our clinical clerk, Mr. G. F. Dickinson.) The vomiting had increased both in frequency and in the duration of the attacks, on one occasion lasting almost continuously for sixteen hours. The attacks bore no relation to the taking of food, and the fluid brought up was often no thicker than water. He was now in an extremely emaciated condition and very weak. He preferred lying on the left side or on the back with his legs drawn up, but did not complain of pain or uneasiness in the abdomen. There was complete anorexia, and the bowels were confined. The outline of the much-distended stomach was distinctly seen through the abdominal walls. The lesser curvature extended from the xiphoid cartilage to near the tip of the eleventh right rib, concavity upwards; the greater curvature, less marked, passed from the tenth left costal cartilage downwards and to the right, crossing the mid-line at a point nearer the pubes than the umbilicus and terminating in the pylorus, about two inches to the left of the right anterior superior iliac spine. Within these limits the bagpipe-shaped tumour pushed forwards the walls. Rhythmical movements could be easily seen and felt. A microscopical examination of the vomit showed undigested fat and muscle fibres, but no sarcinæ.—April 4th: Has been since admission on nutrient enemata. There has been no vomiting. The stomach has been regularly washed out with dilute boracic solution. The abdominal walls are retracted, and no outline of the stomach can now be seen. As the emaciation rapidly progressed, and the pylorus was manifestly the seat of cicatricial stricture, it was determined to dilate it. Accordingly, on April 10th, Mr. Astley Bloxam operated. An incision two inches long was made parallel to the margin of the ribs on the left side, the gastric wall carefully stitched to the margin of the wound, and the stomach opened. The attempt to find the pylorus unfortunately failed, and the

patient gradually sank, and died on April 15th, five days after the operation.

Post-mortem examination showed general contraction of the stomach. The mucous membrane near the pylorus presented several cicatrices, and the pylorus and adjacent gastric wall were so thickened and firmly contracted, and the opening so constricted, as only to allow the passage of the knob of a large probe. All the other structures were healthy.

Remarks.—The amount of acid administered as the dose was rather more than one ounce, and the acid was strong hydrochloric, fuming in the air; part was swallowed, and part rejected. The mouth, fauces, and œsophagus entirely escaped harm, while the pyloric region of the stomach suffered. Seeing that the stomach was probably empty at the time of taking the corrosive (the patient having taken no breakfast), the fact that the pylorus was the only part injured might be taken as confirmatory evidence of Dr. Lesshaft's views as to the almost vertical position of the fasting organ. A point of the greatest interest was the apparent separation of the sloughs from the eighth to the tenth day, as evidenced by the alarming hæmorrhage. Had any food been allowed by the mouth, the bleeding would certainly have been ascribed to it. This case, then, proves the absolute necessity of withholding food by the mouth until this period is safely passed, however urgent the craving and however quiet the symptoms. The complete healing of the ulcerated surfaces was accomplished by about the twentieth to the twenty-fifth day—i.e., ten to fifteen days after the separation of the sloughs. This might serve as an indication of the shortest time during which it is of use to keep a case of active gastric ulcer on rectal alimentation; though it is no guide to the further length of time required, as it is reasonable to suppose that the mucous membrane in gastric ulcer, being in a less healthy condition, would require a longer period for processes of repair to be accomplished. The unfortunate situation of the chief lesions around the pyloric orifice led to the second train of symptoms; and it is to be regretted that at the time of the operation it was found impossible to reach the orifice owing to its extreme stenosis, as dilatation of the stricture, excision of the pylorus, or the establishment of a gastro-duodenal fistula would apparently, if successful, have effected a cure. There is another point worthy of notice in the history—viz., that on first admission the patient had increased pain on lying on the right side, where later experience showed the lesions to have been. Even when he was an in-patient for the second time a similar note was made.

NEW AURAL PROBE.

BY JOHN WARD COUSINS, M.D. LOND., F.R.C.S.,

SENIOR SURGEON TO THE ROYAL PORTSMOUTH HOSPITAL AND THE PORTSMOUTH AND SOUTH HANTS EYE AND EAR INFIRMARY.

THIS little instrument is four inches in length, with a probe and sliding collar at one end and a forceps at the other. It will serve for several purposes in aural surgery, and can be very conveniently used both by patient and practitioner. It makes an excellent cotton holder for cleaning the meatus in chronic otorrhœa, and from its point the soiled material can be instantly cast off. It is especially adapted for the application and removal of the new antiseptic artificial membrane, which was described in THE LANCET of Sept. 14th and 28th, 1889. The aural probe is represented in Fig. 1 as a cotton holder, with a piece of wool twisted over the point. In cases of chronic suppurative disease of the middle ear, the patient must be taught to thoroughly deodorise and cleanse the meatus, and this treatment has sometimes to be repeated several times a day. The secretion should be washed out by gentle irrigation with some lukewarm antiseptic lotion. It is a good plan to deodorise the ear by repeatedly filling the passage with a warm solution by means of a large glass dropper, whenever the injured organ is too sensitive for treatment by injection. As soon as the cleansing process is complete the meatus should be gently wiped dry, and for this purpose a thin strip of wool, three inches and a half in length and half an inch in breadth, must be tightly twisted over the end of the probe. The method of instantly casting off the soiled material by sharply pushing with the thumb the sliding collar over the point is depicted in Fig 2. I recommend my patients to use an aromatic wool for drying and cleaning the meatus. It possesses a very agreeable odour which renders it extremely pleasant to many labouring under offensive discharge. The wool is prepared by saturating it in a strong

FIG. 1.—PROBE CHARGED WITH COTTON WOOL FOR CLEANING AND DRYING THE EAR.

antiseptic solution, and then charging it with the volatile products obtained from the pumiline pine. The aural probe has been designed for the application of the new antiseptic artificial tympanic membrane. The patient must be taught to introduce the artificial drumhead himself, and he will soon learn to perform the operation with great dexterity. The little hat should be placed on the blunt end of the probe,

FIG. 2.—CASTING OFF THE SOILED MATERIAL.

with the handle in a line with the knob on the slide. Fig. 3 exhibits my method of holding the instrument. It must be grasped like a pen, with the middle finger resting just behind the knob, which serves as a guide for the position of the handle. The artificial membrane is then slipped off the probe by pushing up the slide; and in this

way it can be accurately adjusted in the meatus, with the handle resting on the front wall. Sometimes a few gentle touches are required to place it in position, and to regulate the amount of pressure necessary for obtaining the best result.

The artificial drumhead can be easily removed from the

FIG. 3.—METHOD OF HOLDING THE PROBE FOR PUTTING IN THE NEW ANTISEPTIC ARTIFICIAL MEMBRANE.

ear with the little forceps. (Fig. 4.) The patient must hold the blades with the thumb and forefinger, about half an inch from their points, and feel for the handle, which can readily be found behind the tragus; then by gentle traction the artificial membrane can be easily withdrawn.

In cases of chronic otorrhœa and perforation of the membrana tympani a new drumhead must be inserted in the

FIG. 4.—METHOD OF HOLDING THE FORCEPS FOR TAKING OUT THE ARTIFICIAL MEMBRANE.

ear every morning as soon as the local treatment has been completed. The aural probe and large dropper can be obtained from Messrs. Burroughs and Wellcome of London, and the antiseptic pumiline wool is made for me by Messrs. G. & G. Stern, of Gray's-inn-road, W.C.

Southsea.

RETROVERSION OF THE GRAVID UTERUS; REPOSITION AND RECOVERY.

BY H. RANSOM BRAMWELL, M.B., M.R.C.S.

THE interesting case of retroversion of the gravid uterus, reported in THE LANCET of March 22nd, by Dr. Oliver, draws attention to the great importance of early diagnosis and reposition of the displaced organ, and induces me to publish the notes of a case which occurred in my practice last year.

Mrs. A—— sent for me on May 12th, and complained of severe pain in the bottom of her back and within the pelvis. She stated that she had had nine children, and had not menstruated for the last three or four months, but she ascribed this to the "change" of life, and was quite sure, from her feelings, that she was not pregnant. Three days ago the family had removed into a new house, and she had lifted many heavy pieces of furniture and over-exerted herself. On the morning of the 12th she got up to micturate, and felt a sudden intense pain at the lower part of her bowels and in the back; she had some difficulty in micturition, and also felt an urgent desire to defecate, but was unable to do so at the time. Subsequently, during the morning, the bowels were moved several times with great pain, and she had frequent calls to micturate, passing very little at a time. The patient, when I saw her, lay with her knees drawn up, and the least movement caused great pain. On vaginal examination, I found the os very high up, almost beyond reach, behind the symphysis pubis. The vagina was encroached on from behind by a softish solid mass, which, on combined recto-vaginal examination, was found to occupy the space between the rectum and the posterior vaginal wall, and was exceedingly tender on pressure. Abdominal examination disclosed nothing beyond a slight fulness in the hypogastrium, but the fundus uteri could not be felt in the front. Owing to the strenuous denial by the patient of the possibility of her being pregnant, the nature of the case appeared doubtful, and she was treated with opiates, and absolute rest enjoined. During the next three days she had occasional attacks of intra-pelvic pain, and alternating diarrhœa and constipation, with some trouble in micturition. The temperature continued normal. On May 16th she first complained of complete retention of urine. I attempted to pass an ordinary silver female catheter, but met with considerable obstruction. I therefore introduced a fine red rubber male catheter, which caused pain during its passage, and drew off a large quantity of clear urine. She was considerably relieved, and passed a quiet night free from pain. On the 17th there was again complete retention and a great deal of pain, and the urine had to be drawn off. On examining per vaginam, I came to the conclusion that the tumour in the pouch of Douglas must be the gravid uterus in a condition of retroversion, despite the patient's assertions that she could not be pregnant. Having placed her in the genu-pectoral posture, I endeavoured, by pressure through the rectum and vagina, to push the fundus forward, but failed to accomplish it owing to want of assistance. In the afternoon, having called in Dr. L. W. Marshall in consultation, and the diagnosis being confirmed, the urine was drawn off, and the patient again placed in the genu-pectoral posture. A duckbill speculum being introduced, the cervix was seized with a volsella and drawn down, whilst steady and strong pressure was made on the fundus through the rectum and vagina. The patient suddenly gave a shriek of intense pain; the fundus yielded and fell forwards into the abdomen, where it could now be easily felt in its proper place above the pubic symphysis. A No. 5 Hodge pessary was immediately introduced, and the patient was then allowed to lie on her side. From this time forward all symptoms of pain and discomfort were absent; the "quickening" was experienced on June 19th, and the patient was delivered of a full-grown child on Oct. 14th, the infant having a large spina bifida, and dying of convulsions five weeks later. As the sequel proved, the woman was four months pregnant at the time I first saw her. The diagnosis was rendered more difficult by the fact of the patient—who, having had nine children, declared she *ought* to know if she were pregnant—most emphatically denying that such could be the case, this showing the futility of placing too much reliance upon a woman's subjective sensations as a guide to the diagnosis of preg-

nancy. As in the case reported by Dr. Oliver, the symptoms were at first misleading, until retention of urine occurred, and the suddenness of their onset, coupled with a history of the lifting of heavy articles of furniture three days previously, point to the probability that the displacement was of recent occurrence and was produced by the over-exertion. The importance of recognising the condition, and of securing the replacement of the uterus, before the pregnancy has gone as far as the fifth month, is evident from a consideration of the results of prolonged incarceration of the displaced organ after the fourth month, with its attendant risks of sloughing of the bladder, extravasation of urine, and peritonitis.

Stapleford.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

UNIVERSITY COLLEGE HOSPITAL.

A CASE OF BULLET WOUND OF THE ABDOMINAL AORTA, IN WHICH THE BULLET REMAINED WITHIN THE LUMEN OF THAT VESSEL.

THIS case is remarkable for the wound of the abdominal aorta, an occurrence of considerable rarity, and for the fact that the bullet *remained* in the lumen of that vessel, where it was found post mortem, not having had sufficient penetrating power to carry it quite through the artery. Experience of such injuries is necessarily limited, and the editor of the "Medical and Surgical History of the War of the Rebellion," in writing on the subject of injury to the large vessels of the abdomen by gunshot, says:[1] "Those cases in which lesions of the bloodvessels were the most important feature have not been well studied or classified, for the obvious reason that most of the patients perish before help can be accorded, and are left with the slain on the field." There is a specimen in the museum of the Royal College of Surgeons showing a bullet and piece of skin lodged in the aorta just above the semilunar valves, both adherent by recent lymph to the wall of the artery. The man had survived the injury for three days. For the following account we are indebted to Dr. Cyril Jecks, resident medical officer.

H. V——, a female, aged thirty-six, was brought to University College Hospital at 2.15 A.M. on July 16th, 1889. She was extremely blanched; the pulse was imperceptible at the wrist. She died in a few moments, after a few sighing respirations. Her clothes were saturated with blood. At the post-mortem examination no marks of bruising or violence were found on the body, except two bullet holes and a small discoloured swelling over the posterior part of the right iliac crest. The bullet holes were three inches apart. The right was surrounded over an area as large as a crown piece with grains of fine powder embedded in the skin, which was also scorched and brown for the same extent. It was situated exactly in the middle line of the body, half an inch below the tip of the ensiform cartilage. On tracing the course of the bullet, it was found to have perforated the falciform ligament and entered the liver immediately to the left of the ligament; it then passed through the liver and immediately outside the right kidney, then obliquely through the abdominal wall to the spot noticed above as bruised over the posterior part of the right iliac crest, where the bullet, weighing 148 grains, was found immediately beneath the skin. The left bullet wound was on exactly the same level as the right, through the sixth intercostal space just below the junction of the rib and cartilage. The course was as follows: it had grazed and bruised the pericardium, just touched the anterior border of the left lung, then through the diaphragm, piercing the liver about an inch and a half from the extreme left margin, through the gastro-hepatic omentum, almost touching the small curvature of the stomach, through the upper part of the pancreas, and then into the aorta. In the aorta was a ragged hole in the anterior wall which just admitted the tip of the little finger. This was situated immediately above the origin of the cœliac axis. In the posterior wall of the aorta, on the same level, was a small hole, also very ragged. The bullet had fallen down the aorta to its point of bifurcation, a distance of three inches and a quarter from its point of entry into the vessel; it weighed 169 grains. The abdominal cavity was filled with clotted and fluid blood, and there was extensive effusion into the sheath of the aorta, especially in the region of the left renal artery.

Death in this case did not occur until an hour and a half after the infliction of the wounds. From the evidence given at the coroner's inquest the wounds appear to have been self-inflicted.

[1] Part 2, vol. ii., p. 174.

ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

CARCINOMA OF THE PYLORUS; PYLORECTOMY; RECOVERY.

(Under the care of Dr. CARTER and Mr. H. G. RAWDON.)

THE operation of excision of the pylorus for cancer is one of the most formidable that any surgeon can be called upon to perform. It is also one of those which have proved extremely fatal, and all instances of its performance should be placed on record with sufficient detail to enable the profession to judge of its usefulness as a means of prolonging or of saving life. Some recent statistics of this operation collected by M'Ardle[1] show this result: of sixty-two completed operations for cancer of the pyloric end of the stomach, twenty-one died directly from the operation, fourteen from peritonitis or from sepsis, and twenty-seven made a good recovery. In the series of sixty-one cases collected by Winslow[2] only sixteen recovered; collapse was the chief cause of death. Any modification of the method of procedure which proves satisfactory in shortening the operation, and so diminishing the amount of shock which usually results from it, demands the fullest consideration, and the successful use of the interrupted suture with decalcified bone plates in this case will doubtless cause this method to receive further trial at the hands of future operators. This case appears to have been a favourable one for the operation. The patient was not exhausted, and although the growth was somewhat extensive, there were no adhesions to the surrounding structures or evidence of secondary disease of the glands, peritoneum, or other parts. M'Ardle, in the paper above quoted,[1] said that out of 1342 cases of carcinoma of the stomach the disease was limited to the pylorus in 802, and of this number 496 were without adhesions, and there was no glandular involvement. An important question which requires an answer is this, What is the ultimate gain as regards prolongation of life in those patients who have survived the operation? Butlin[3] says: "There is not one, therefore, of those who recovered from the operation who can be claimed to have been really cured of the disease. ..... Yet the cases in which recovery from the operation took place were, so far as could be judged, singularly favourable for the operation," &c. There are now, however, cases on record in which life was prolonged for some years. Thus Wölfler[4] reports a case in which, after resection of the pylorus for carcinoma, the patient was quite comfortable five years later; Rydygier,[5] one of survival for two and a half years; Kocher,[6] two, one living for three years afterwards, and one without recurrence for two years. Gross[7] considered five years and a half the longest period of survival after the operation. Medicine cannot do more than relieve; and if the immediate mortality attendant on the operation can be diminished, we may look forward to a better result in the future, as resort will be had to surgical aid at an earlier period of the disease, when the general condition is more favourable and the growth comparatively small. The history of abdominal surgery is not without examples of failure in the early stages of some of the operative methods now daily carried out with success. For the

[1] Dublin Journal, Med. Soc., 1887.
[2] American Journal of the Medical Sciences, 1885.
[3] Operative Surgery of Malignant Disease, p. 217.
[4] Sajous, vol. ii., 1888, p. 86. [5] Ibid.
[6] Deutsche Zeitsch. für Chirurgie, Bd. xxvii.
[7] Medical News.

account of the following case we are indebted to Mr. W. H. Carthew Davey, senior house surgeon.

J. A——, aged fifty-five, was admitted into the hospital on Nov. 14th, 1889, with symptoms of pyloric obstruction. The case presents such interest from a surgical point of view that the account of its medical aspect must be brief. The symptoms and physical signs were those usually met with in this disease, with one or two exceptions. 1st. The presence of a tumour under cover of the left costal cartilages, on a level with the umbilicus, thought to be a displacement of the pylorus (this was verified at the operation). 2nd. The length of time elapsing between the taking of food and the occurrence of vomiting, the longest time being thirty-six hours.

The treatment adopted for the first week was daily washing out of the stomach with a solution of borax and bicarbonate of soda; the diet consisted of pancreatised milk and beef-tea; but in spite of this treatment vomiting and loss of flesh continued, the patient losing 10½ lb. in weight in the week. Then came the question of surgical interference. Was it possible to remove the growth? If not, perhaps gastro-enterostomy would relieve the patient, for to allow him to remain in such a condition meant death at no distant date. It was then decided that an exploratory incision should be made. Accordingly Mr. Rawdon, assisted by Dr. Alexander, made an incision of about four inches in length extending from just below the ensiform cartilage to the umbilicus. After the peritoneum had been opened, the finger was introduced and the bearings of the tumour made out; it proved to be the pylorus and adjoining portion of the stomach. There were fortunately no adhesions to neighbouring viscera; the diseased mass was therefore somewhat easily drawn up through the incision and surrounded by sponges; and it being found on examination that nearly one-third of the stomach was involved in the carcinomatous mass, it was decided to excise it. The vessels coursing along the curvatures of the stomach were ligatured at a point where the section of that viscus would have to be made. The duodenal mesentery was then torn through with the fingers, and a piece of small-sized rubber tubing passed round the bowel and tied in a knot; this was effectual in preventing any escape of its contents. The mass being well drawn out through the abdominal wound, and well packed round with warm antiseptic sponges, the affected parts were excised, two or three vessels in the coats of the stomach requiring a ligature. The duodenum was next cut through between the pylorus and the rubber tubing. The entire mass was now only attached by its omental connexions; these were gathered into a pedicle, transfixed, and tied. The severed duodenum was now well held forward and the rubber tubing taken off. Three or four arteries spurted, but were quickly tied. The incised edges of the stomach were stitched with a continuous suture of fine Chinese silk, after the method of Lembert. The suturing commenced at the lesser and proceeded towards the greater curvature, the suturing being discontinued one inch from the greater curvature, thus leaving an opening sufficiently large to admit the introduction of one of Senn's decalcified bone plates. A Senn's plate with four threads of Chinese silk attached was then inserted into the opening, and three out of the four of the silk threads attached were passed through the walls of the stomach, about one-sixth of an inch from its cut edges. A second plate was introduced into the duodenum, and the four silk threads attached to the plate were passed through the walls of the bowel a short distance from its cut margin. The plates were then brought into apposition and held firmly together while each corresponding pair of threads were securely tied, the lowest being tied first. Thus the serous surface of the bowel was brought into immediate contact with the serous surface of the stomach. The parts, after being carefully sponged, were replaced within the abdomen, the wound closed in the usual way, and antiseptic dressings applied. The patient rallied well after the operation. He was supported by nutrient enemata and suppositories. For the first six days, no food or drink being allowed by the mouth, he suffered intensely from thirst, which, however, he bore with great fortitude, and happily it became more and more endurable as time went on. One week after the operation he was allowed a little pancreatised milk every hour; this was gradually increased, till about the twelfth day he was taking two pints of milk in the twenty-four hours. From now his convalescence was uninterrupted, his diet being more liberal as time went on. At present his appetite and digestion are most satisfactory, he has no discomfort whatever after food, which he much relishes, and has gained nearly two stone in weight. He intends to resume work as a sailmaker very shortly.

THE INFIRMARY, BURTON-ON-TRENT.

A CASE OF COMPOUND COMMINUTED FRACTURE WITH WOUND OF BRAIN, FOLLOWED BY HERNIA CEREBRI; RECOVERY.

(Under the care of Mr. T. B. MASON.)

HERNIA CEREBRI is a serious complication of any wound of the brain, and one which causes considerable anxiety as to the ultimate result. In the case of this patient it developed on the ninth day, and was apparently not cured until more than six weeks had elapsed, when it was noted as almost "level with the surrounding skin;" during this time the patient emaciated, and suppuration took place around the protrusion. Professor Nancrede[1] gives the average time for the development of hernia cerebri after wound of the brain as from the fifth to the seventeenth day, whilst it has appeared within the first twenty-four hours, and as late as the sixty-eighth day. Of eighty cases which he had collected from various sources, only twenty-five ended favourably. In all cases of cerebral wounds, the possibility of the development of this complication must be recollected, and the strictest antiseptic treatment employed; it is also of moment to remove causes of irritation and to secure primary union of the super-imposed wound of the soft parts. When the hernia has developed, there is a tendency at present[2] to be satisfied with strict antiseptic cleanliness, and when it has become more chronic, with the employment of pressure. In some cases, however, as in this one, removal of the tumour has appeared to be of advantage, and there are several well-authenticated cases of recovery; in others, removal has been followed by rapid recurrence and ultimately death from exhaustion or coma. Quesnay[3] had a patient under his treatment who pulled off the protrusion himself and afterwards recovered. Maclaren[3] put a silver plate in the hole in the skull, leaving an interval for drainage, removing the hernia from time to time as it recurred. For the following notes we are indebted to the house surgeon, Mr. W. Gibson.

G. W. B——, aged six, was admitted on Sept. 19th, 1889, with a compound comminuted fracture of the skull, caused by a kick from a horse. The wound, which was much lacerated, was situated over the right frontal eminence, and a square inch of bone was driven into the brain. There was no paralysis, and the boy was able to give an account of the accident. Chloroform was administered, and Mr. Mason easily removed the piece of bone with dressing forceps. The wound was well irrigated with 1 in 40 carbolic lotion, a drainage-tube inserted, and the edges brought together with three silver sutures, and dressed with protective and Gamgee tissue. The patient was ordered to take nothing but ice.

Sept. 20th.—Complains of headache; no paralysis. Temperature 100°; pulse 125, high tension. He was ordered three grains of calomel and seven grains of jalap. One pint of milk in the twenty-four hours was permitted to be taken.

21st.—The wound was dressed; there was no sign of healing.

28th.—The sutures have torn their way through the skin, and brain substance is seen to be fungating through the opening in the dura mater. There is no paralysis. A second piece of bone, nearly as large as the first, was found to be loose, so it was removed with a pair of dressing forceps.

30th.—Temperature 99°; pulse 100. Hernia cerebri rapidly increasing in size; no paralysis, but pressure on the hernia causes flexion of the left elbow. The boy is rapidly emaciating.

Oct. 9th.—On more liberal diet the boy's condition has improved, but the hernia cerebri is about the size of a Tangerine orange.

10th.—Chloroform administered, and the hernia cerebri sliced off level with the skull. The hæmorrhage was free, but it was easily controlled by pressure with a pad of boric lint. No paralysis.

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[1] International Encyclopædia of Surgery, vol. v., p. 68.
[2] Erichsen, vol. i., p. 784. Holmes: Surgery, its Principles and Practice, p. 166. Walsham, p. 351. Dictionary of Surgery: Brain (Hernia of).
[3] Clin. Soc. Trans., vol. xix., p. 159.

11th.—Temperature: morning, 98·4°; evening, 104°.

12th.—As pus was burrowing under the orbicularis palpebrarum, a counter-opening was made, which gave relief, and the temperature fell to normal.

14th.—The hernia is again rapidly increasing in size. Temperature normal.

20th.—General condition much better. Boy sits up in bed and takes an interest in all that goes on in the ward. Temperature normal since the last note.

22nd.—Hernia larger than ever. Was again sliced off under chloroform without producing any symptoms, and dressed with iodoform and boric lint.

28th.—Dressed every day, as the discharge is abundant. Hernia again increasing, so firm bandaging was tried, with the result of causing slight but gradual diminution in size.

Nov. 12th.—Since the last note the hernia has been gradually diminishing, and it is now nearly level with the surrounding skin. The wound is granulating well, the boy has no paralytic symptoms, and lately he has been getting quite fat.

22nd.—As there is a hole in the skull about an inch and a half each way Mr. Mason has proposed to try the experiment of grafting some small strips of rabbit bone on to the granulating surface. This was done in the following manner: A young rabbit, about three weeks old, was killed and a piece of bone removed from its cranium and immediately immersed in warm boracic lotion. Small strips were then cut off this and dropped on to the granulating surface. About a dozen were placed on altogether, some being the size of a pin's head, others about an eighth of an inch long.

24th.—On removing the dressing, which consisted of green protective and boric lint well strapped down, most of the pieces of bone came away, but three pieces were adherent.

28th.—The grafts have so stimulated the granulating surface that it is not above half its original size. One or two grafts are still adherent.

30th.—Another rabbit was killed, and the wound grafted as before, excepting that a piece of periosteum from the cranium was also laid on this time.

Dec. 3rd.—The grafts have nearly all come away, and even the three old ones do not seem as though they would remain attached much longer.

20th.—Wound nearly healed, but the remaining grafts are quite dead.

Jan. 20th, 1890.—A shield has been supplied for the boy, which he was ordered to wear constantly, and he was discharged quite well.

Note by Mr. MASON.—Although the pieces of bone did not permanently become fixed, yet the transplantation seemed to start most rapid cicatrisation, the granulating surface not showing any sign of this before. Several pieces became distinctly vascular.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Operation for Radical Cure of Non-strangulated Hernia.

AN ordinary meeting of this Society was held on April 8th, the President, Mr. Timothy Holmes, in the chair.

Mr. BARKER gave to the Society the results of a study of fifty consecutive cases of operation for the Radical Cure of Non-strangulated Herniæ. The series was studied with the following questions in view: 1. Was the procedure called for? 2. Was it safe—(*a*) as regarded the patient's life; (*b*) as regarded the contents of the scrotum? 3. Did it secure against a return of the hernia? All the cases in the series were operated on for non-strangulated herniæ which were not amenable to other treatment. The first question was shown to be answered in the affirmative by common experience as far as selected cases went. The safety of the procedure was indicated by the absence of a single death or ill effect to the structures in the scrotum in any case among the fifty. True suppuration of the wound only occurred in two cases; the rest healed well. There were no cases of wound-infection or shock. In two instances the bowels were coughed out during the operation, but no ill effect followed. The stitches in the skin were usually removed on the tenth or twelfth day; those in the ring were left untouched. The ages of the patients varied from three months to seventy years. The numbers for each five years were given, as well as the varieties of rupture met with. Some of the details of operation were alluded to, and the general subsequent course of the cases during convalescence. The examination of the question of security against recurrence was then undertaken, and the numbers were given of those which returned. Some conclusions which seemed to follow from the study of this series of cases were then given by the author.

Mr. BENNETT said that the procedure was called for, but less frequently than some might be led to believe. He would divide the cases into two classes: people who were still young and adults. In all young people, in whom there was a strong tendency to natural cure, there was very rarely need for operation; he observed, however, that the author's series contained a case of operation on an infant three months of age. He himself had never operated on any child under eighteen months, and he thought that the necessity for it earlier than this must be extremely rare. In the adult there was no tendency in ordinary cases to a cure, and a large percentage of them required active treatment. The operation was safe as regarded the patient's life, provided it were done with ordinary care, though fatal cases had happened which had not been recorded. The question whether the contents of the scrotum would suffer depended on the manner in which they were treated. He had twice seen the testicle slough, and in each a serious attempt had been made to dissect away the sac from the scrotum. Yet the testis did not readily necrose, for in one instance he had seen the whole cord and vas deferens divided without harm happening to it, and in operating for varicocele he commonly divided the spermatic artery without bad results; the structures of the cord, in fact, would bear a great amount of interference without danger. The question whether the operation secured the patient against a return of the rupture depended a great deal upon the age of the individual. Young patients were certainly cured; but in the adult, in the vast majority of cases, the patient was relieved, but not cured, especially if the ring were large and the sac contained much gut. The operation, however, did good, as it enabled the patient to wear a truss with greater comfort. It was said by some that the pressure of a truss would lead to the absorption of the products thrown out in the attempt at cure. This was true if the truss were worn too soon, but not so if it were applied six months after the operation. He asked what was the effect in very young subjects of returning gut into the abdomen which had long been accustomed to be outside; he believed it favoured the production of herniæ in other situations. He had noticed the development of such secondary herniæ in at least three instances.

Mr. GREIG SMITH said he would never operate on children, and rarely in irreducible hernia, unless the patient were in danger of life or incapacitated for work. The author's paper had shown that if the sac were divided at the neck it was unnecessary to remove the body and fundus from the scrotum, and that perfect closure of the external ring was an efficient means of completing a radical cure. He himself held strongly to the view that if the sac of the hernia were removed the patient was deprived of useful material for promoting a radical cure If a truss had to be worn afterwards, he maintained that the cure was not a radical one. An operation to be thoroughly successful should produce a perfect cure with a very small risk to life, and of all methods hitherto published he thought Macewen's seemed to be the best. The aponeurosis of the external oblique in old herniæ became almost semicircular at the ring, and was pulled down with difficulty. If a few longitudinal incisions were made, they would liberate the agglutinated fibres, and the ring could be effectually closed.

Mr. PARKER had operated on many cases in children in whom, in a large proportion of cases, the canal did not close up, and they would otherwise be saddled with a troublesome hernia which would be more dangerous if operated on later. His method was to expose the sac, sew up the neck, and then stitch the pillars of the ring; he cut away nothing, and did not divide the neck of the sac. He had lost no cases after the operation, though one had died of diphtheria after the wound had healed. He had not followed up his cases, but he took it for granted that they were not at present suffering much from their ruptures.

Mr. PYE said that Mr. Bennett's explanation of the cause of secondary rupture was difficult to accept when the varying condition of abdominal distension in infants was borne

in mind. He had heard no allusion to the method in which the sac should be treated in that large proportion of cases in which the rupture was congenital and the testis lay in the sac; of course in these the sac could not be excised. As to the auto-curability of infantile herniæ, he had been much pleased with the results of the worsted truss; it was certainly passively curative.

Mr. KIALLMARK observed that the author had only operated on three cases of umbilical herniæ; he asked if this was because they were rare or because these ruptures were unsuitable for operation.

Mr. BOYCE BARROW said that the wearing of a truss in irreducible hernia was unsatisfactory, and therefore he should advise operation. He had never seen a case of reducible hernia which could not be retained by a truss. He had operated on a considerable number of cases for the radical cure, but he had several failures. Whether the operation were desirable depended on whether it could be so done as to do away with the necessity for a truss. With regard to the safety of the contents of the scrotum, in nearly all cases he had removed the whole of the sac, and in not one single instance had the scrotal contents suffered. He had used kangaroo tendon, silk, and silver wire for suturing the pillars of the ring, and he preferred the latter, though he had had to remove them more than once on account of suppuration.

Mr. HOWSE had operated on children from one and a half to twelve years of age. He ligatured the neck of the sac, sometimes cutting it across and sometimes not. He sutured the pillars of the ring. In the great majority of cases in young children no operative measures were needed if the rupture were reducible. He had met with one death in attempted radical cure, the patient succumbing from septic peritonitis. On opening the sac in a congenital hernia, if a small testis were found adherent to omentum or intestine, he usually removed it. He believed that a spring truss could be worn by very young children without ill effects.

Mr. HOLMES thought that the Society would feel that there were two parts of this subject, and that the second, which was outside the scope of the author's paper, was most important—namely, what were the indications for the operation? The dangers of surgical operations, though very much diminished, had not altogether been got rid of. He thought that the procedure might still be considered radical even although the patient were not allowed to dispense with a truss.

Mr. BARKER, in reply, said that the question of selection of cases depended upon the risk. He admitted that in infants there was a natural tendency to cure. He did not recommend the use of the truss afterwards except in the case of umbilical rupture; the cases of congenital herniæ had been treated precisely like the others. He would operate on umbilical herniæ if small, and for suturing the ring he thought that silk was the best.

PATHOLOGICAL SOCIETY OF LONDON.

Cancer of Œsophagus eroding Trachea. — Central Quiet Necrosis of Radius. — Lymphatic Nævus of Tongue. — Macroglossia.—Tuberculosis in Birds.—Fracture dislocation of Spine.—Infantile Splenic Enlargement.

AN ordinary meeting of this Society was held on April 1st, the President, Dr. W. H. Dickinson, in the chair.

Dr. W. J. COLLINS read notes of a case of Cancer of the Œsophagus eroding the Trachea. The patient, a male aged fifty, was admitted in October, 1888. There was no family history of cancer. For two months he had dyspnœa and cough, later dysphagia developed, and he had lost a stone and a half in weight. On admission, the respiration was strident, and fluids returned when efforts were made to swallow. A tube was passed, and was arrested thirteen inches from the teeth. At the necropsy ulceration was found to begin two inches below the cricoid cartilage, and extended for two inches downwards; there was very little constriction. On opening the trachea, an erosion was found which led into the mediastinum, and exposed a gland. The mediastinal glands were infiltrated with secondary deposits. —The PRESIDENT asked if there was regurgitation of food through the trachea or fetid expectoration.—Mr. ROGER WILLIAMS asked what was the total duration of life in this case. Glandular carcinoma was usually said to be more chronic in its course than epithelioma. — Dr. VOLCKER asked the author if he could give any explanation as to why carcinoma occurred so frequently at this part. In four out of six cases he had recently witnessed the site of the growth was opposite to the bifurcation of the trachea.—Dr. COLLINS, in reply, said the symptoms were first noticed in August, and the man died in November. There was no regurgitation of food through the trachea, nor was there fetid expectoration, though the breath was offensive. He could not explain the selection of the site of growth.

Mr. WATSON CHEYNE showed a specimen of Central Necrosis of the Radius without Suppuration. The patient was a boy aged fifteen, who had an acute abscess at the upper and anterior part of the forearm ten months before admission. This abscess opened, and healed in two months. The greater part of the radius continued to increase in thickness, especially at the upper and middle portions, and the patient suffered a little pain at night, but was otherwise in good health. Chronic osteitis was diagnosed, and Mr. Cheyne proceeded to gouge a trough in the bone. In doing so at the upper part he found a soft spot in the bone filled with granulation tissue, and on following this inwards he came on a sequestrum two inches and a half in length in the interior of the shaft. The sequestrum was loose, and was embedded in granulation tissue, but there was no pus or fluid around it or in the neighbourhood. The sequestrum had evidently come from the inner part of the dense bone next the medullary cavity. Mr. Cheyne explained the occurrence by supposing that the acute inflammation in the first instance probably blocked the nutrient artery and the periosteal vessels, and thus deprived a considerable area of the bone of its blood-supply. Part of this bone recovered, but a small portion died, and was separated from the living in the usual manner. This dead piece was at a considerable distance from the seat of the abscess, and never became infected with the pyogenic cocci; hence the absence of suppuration around it. Mr. Cheyne thought that some of the cases described as "quiet necrosis" were in all probability instances of tubercular necrosis. — Mr. ROGER WILLIAMS had seen an almost analogous case in a healthy young woman. There was a swelling in the apex of Scarpa's triangle. An incision made into this freed a sequestrum lying in a cyst without suppuration; it had migrated to a considerable distance from its site of separation.

Mr. J. HUTCHINSON, jun., exhibited sections illustrating Lymphatic Nævus of the Tongue, obtained by excision from the dorsum of the tongue of a child. The condition could be recognised during life by the presence at some point on the dorsum of a cluster of large papillary processes which showed here and there distinct vesicles. The latter were translucent, and if pricked allowed of the escape of clear fluid (lymph). They were usually largest close to the surface, and might easily by accident become full of blood. There was a tendency to recurrent attacks of inflammation in the area affected, as in the case of macroglossia, but apparently in lymphatic nævus the muscular substance of the tongue did not contain dilated lymphatics, or only in its most superficial part. On section the spaces were seen to have a distinct wall presenting endothelial cells, and were often full of lymph coagulum. There was probably new formation as well as dilatation of pre-existing lymphatics in this condition, which was allied to that figured by Mr. Hutchinson, sen., in the Medico-Chirurgical Transactions, vol. lxviii. Specimens of lymphatic nævus were also referred to, obtained from a young man under the care of Mr. Treves; in this case the condition had existed as long as he could remember.—Dr. COLLINS had recently seen a case of lymphatic œdema of the lower lip in a girl. The mucous membrane bulged inwards and the skin outwards; a plastic operation cured the deformity.—Mr. BOWLBY had seen several cases which had been diagnosed as "degenerative nævus." He thought that "lymphangioma" was a better name for them. Most cases were congenital, but in one instance, in a man thirty-four years of age, the lesion had only been noticed for five years.—Mr. HUTCHINSON, in reply, said that in his case the swelling had been noticed as long as he could remember. The term "lymphatic nævus," he thought, was less cumbersome.

Mr. BARKER described in detail the condition of a tongue, the greater part of which he had removed from a young child some years ago with complete relief. The diagnosis had been "Lymphangioma Cavernosum," and blue colouring matter was in readiness for injection of the lymph spaces immediately after operation. The tongue presented

generally a lumpy, papillated appearance, the eminences on its surface having almost a translucent clearness, probably due to the distended lymph spaces underneath the papillary layer. These spaces were found to be quite irregular in shape and distribution in relation to the various components of the tongue. They penetrated everywhere except actually into the epithelial covering of the organ. The muscle bundles were separated by them and by a certain amount of exudation or lymphoid tissue. In most cases, long-branched, lymphatic vessels extended up between the papillæ. The muscle fibres appeared normal in size, but slightly irregular in arrangement owing to the new tissue between them. The condition was congenital, but had been greatly aggravated by acute and subacute attacks of glossitis from time to time. There had been no recurrence since operation, and the shape of the tongue was excellent. An examination of the specimen simply confirmed the views expressed by the author of the paper in his article on the tongue in Holmes' System of Surgery—viz., that macroglossia was in most cases due to lymphangiectasis alone, with but little change in the other structures of the organ.

Dr. WALTER SIBLEY read a paper on Tuberculosis in Birds, and showed illustrative specimens. Giving first a more complete description of the histology, and then showing specimens illustrating the nature of the disease, among which were tubercular tumours connected with bone such as from the ribs and in connexion with the knee-joint from a peacock, he next mentioned that in some birds the deposits in the viscera closely resembled the leprous bodies found in man. A remarkable analogy existed between tuberculosis in birds and leprosy in man in the extreme abundance of the bacilli, which for a long time exercised but little effect on the surrounding tissue, and multiplied to an enormous extent without causing sufficient inflammatory action to lead to breaking down and ulceration. So also the close resemblance of the early deposits to the leprous bodies, and the presence of the bacilli in the lymphatic vessels. Again, the chronicity of the disease associated with the presence of nodules in various tissues, together with the rarity of pulmonary deposits, especially in the early stages. In snakes the disease often began as subcutaneous nodules crowded with bacilli, and for long periods without deposits in the viscera. The etiology of the disease was next dwelt upon. He believed that heredity played a very large part. The infection theory—namely, that the birds consumed bacilli with their food, and so contracted tubercle—was not convincing. In the case of fowls, the disease was limited to certain broods, and other birds, such as pigeons, living on the same spot, continued exempt. The disease had been watched on one farm for six years, and it had apparently spread to a neighbouring one through the interchange of eggs for sitting. The direct experiment of feeding birds on tubercle bacilli had so far been negative. Reference was made to the experiments of Ribbert at Bonn, and of Straus and Wurtz in Paris, who had for a year fed hens on sputum from phthisical patients, and in no case did the birds become tubercular. While in Germany he had fed pigeons on sputum rich in bacilli, also with negative results. Of the organs which suffered the most, the spleen stood first, and was often enlarged many times its natural size from deposit, when there was only microscopical deposit elsewhere. Thus far he had found tuberculosis in the following birds dying naturally in confinement, as demonstrated from the microscopical appearances and the presence of bacilli:—Canaries, corncrakes, doves, finches, fowls, geese, guan, owls, peafowls, pheasants, pigeons, swans, and vultures. It did not appear that the carnivorous were more exempt than the graminivorous species.—Mr. ROGER WILLIAMS thought the appearances were different from those found in human tubercle. The nodules present appeared to arise from multiplication of the stable elements of the tissues, and not from a leucocytic source.—Dr. LITTLE asked if by any means the flesh of tuberculous birds could be distinguished with the naked eye.—Dr. DICKINSON asked if the birds examined were wild, and what was the author's view as to the method of infection.—Dr. SIBLEY, in reply, said that all the birds had been in a state of confinement. He felt almost convinced that tuberculosis was not to be found among animals or man in a state of nature. He knew of no way of recognising the flesh of a tuberculous bird; they were all extremely emaciated, and the abdomen was usually bulged forward by the enlarged liver. There might also be tumours in various parts of the body. Other animals the subjects of tuberculosis, such as cows and camels, were often fat.

Mr. EDGAR WILLETT then related a case of Fracture-dislocation of the Spine successfully treated by operation. The clinical history of the case had already been reported in THE LANCET of Aug. 17th, 1889, page 315, by Mr. Henry Thompson of Hull, under whose care the case was. The facts as reported were as follows: In 1883 a portion of an old wall fell upon a boy aged nine, in consequence of which he was in the Hull Infirmary for three weeks with paraplegia. At this time no operation was performed. The paraplegia lasted thirteen months, and then completely disappeared, leaving an angular curvature in the lower cervical region. During these thirteen months an abscess formed in the neck, and discharged for six months. Complete recovery ensued, except slight dysuria. Early in January, 1889, pain returned, with paraplegia, and he was again admitted into the hospital under Mr. Thompson. He rapidly got worse, and on Feb. 13th the laminæ and spinous processes of the three upper dorsal vertebræ were removed. He made a good and complete recovery, and left the hospital on July 24th. He remained well until Sept. 25th, when he caught cold bathing, and was admitted again on Sept. 28th, and died on Oct. 6th from acute pneumonia. The specimen showed the lowest os cervicalis and all the dorsal vertebræ in section, though the several bones were traced with difficulty at the old injury.—Mr. WATSON CHEYNE doubted if the case were really one of fracture-dislocation; it appeared to him like an instance of angular curvature. He asked how soon after the accident the paraplegia happened. The symptoms, he thought, might be due to a chronic process associated with thickening of the spinal membranes.—The PRESIDENT asked for further details of the operation.—Mr. WILLETT replied that the boy was admitted immediately after the accident. The paraplegia lasted thirteen months. An incision was made over the vertebral spines, the soft parts dissected off, and the spines and laminæ removed. The wound closed by first intention. On making a section of the bones, a small abscess cavity was found containing inspissated pus; this suggested a possible tubercular focus.

Dr. LITTLE showed microscopical sections from an Enlarged Spleen in an infant. The splenic enlargement was discovered when the child was five months old, and continued to increase until the death of the patient when aged eleven months. The child was the eighth of the family, was delicate from birth, there were no signs of osseous rickets, and no evidence of syphilis or gland enlargement. The spleen weighed eleven ounces, contained no nodules or gummata, and showed no signs of capsulitis. Microscopically it showed only normal splenic tissue. There was no sign of leukæmia, and he looked upon it either as a rare form of splenic enlargement of unknown origin, or as an instance of visceral rickets.—The PRESIDENT had seen many cases of much enlarged spleen in infants; he thought it might be associated with rickets, which, when the osseous tissues were but little affected, might chiefly involve the viscera. The mother was ill-nourished, and probably supplied deficient milk.

The following card specimens were shown:—

Mr. H. B. ROBINSON: Dermoid Cyst of Forehead.

Mr. S. G. SHATTOCK: Congenital Atresia of Œsophagus.

MEDICAL SOCIETY OF LONDON.

Removal of Pyæmic Thrombi from Lateral Sinus.—Pernicious Anæmia.

AN ordinary meeting of this Society was held on March 31st, the President, Mr. Knowsley Thornton, in the chair.

Mr. BALLANCE read the notes of four cases in which he had removed Pyæmic Thrombi from the Lateral Sinus. The first case was that of a man aged twenty-one, who was exhibited to the Society. He had had a history of discharge from the ear for fifteen years, which had been much less just previously to the present illness. Before admission there had been headache, vomiting, and several attacks of shivering. When taken into the hospital he was sleepy and flushed; he vomited, complained of intense headache, and had pain at the back of the neck. There was pus in the external auditory meatus with a temperature of 104°. Three days after admission the tympanum was curetted

and some thick offensive pus removed. Next day he was no better, and as œdema over the mastoid had developed, together with tenderness over the jugular vein, it was decided to open the mastoid at once. The bone was found green and offensive; half a drachm of pus came from the groove for the lateral sinus, and pus was also found on the posterior surface of the petrous bone. Diseased bone having as far as possible been removed, the sinus was opened longitudinally and syringed out; it contained offensive clot. The jugular vein was tied in the neck and divided between two ligatures. The patient was better after the operation, but six days later blood-stained sputum was expectorated, and signs of a pyæmic infarct of the lung were detected. This was followed by swelling of the joints, the formation of a large abscess over the buttock, and a smaller one in the neck above the ligatured vein. The lateral sinus, as far back as the torcular Herophili, came away as a slough. The patient left the hospital well seventy-four days after the operation. The second case occurred in a boy aged eighteen, who was admitted with severe pain in the head, vomiting, sleeplessness, feverishness, pain in the neck and shiverings. There was œdema over the mastoid and tenderness over the internal jugular vein. The temperature was 104°; the pulse 120; the tongue was dry and brown; there was double optic neuritis, and fetid pus issuing from the external auditory meatus. An operation similar to that of the last case was done; fetid pus was found in the groove for the lateral sinus, but a still larger collection was discovered on the posterior surface of the petrous bone. The sinus itself had sloughed, and was found full of purulent clot; the jugular vein was tied. The patient, who was at first relieved by the operation, died of hyperpyrexia, and the necropsy revealed several breaking-down infarcts in the lungs. The anterior part of the right lateral lobe of the cerebellum presented a slight greenish colour. The third case occurred in a girl aged fourteen. For two years there had been a discharge from the right ear, with pain. The illness commenced suddenly with rigors and vomiting. The external meatus was blocked by a polypus, and there was tenderness over the mastoid. The polypus was removed and the tympanum scraped; but this giving no relief, the sinus was opened up, and was found to contain pus and breaking-down clot; the jugular vein was ligatured and divided, and the lateral sinus was syringed out from the opening in the neck. The patient died of acute laryngeal spasm, due to a small abscess in the right aryteno-epiglottic fold. There was found caries of the petrous bone, and the lungs and spleen contained infarcts which were not breaking down. In the fourth case there was also a two years' discharge from the left ear, and the patient, a woman, was seized after exposure to cold with vomiting, pain in the head, and high fever. There were pain and tenderness over the mastoid, with slight swelling of the discs. An operation like that performed in the other cases was done in this also, the internal jugular vein being ligatured, and offensive clot removed from the sinus. The operation was performed three weeks ago, and the patient was rapidly convalescing. It was difficult to estimate the number of cases of this kind which occurred every year, many of them certainly remained unrecognised and untreated. It was curious that when the lateral sinus was quite obliterated the patient should suffer no inconvenience from it. He remarked that the first patient said that he felt the fluid trickle down the internal jugular vein when it was irrigated. This was contrary to the experience of Haller, who had investigated the subject, and had come to the conclusion that both arteries and veins were insensitive structures. It was most important to make an early diagnosis; it was difficult to distinguish between typhoid and pyæmia. It should be remembered too that in the first stage of typhoid otorrhœa had been observed as a symptom. Attention should be paid to the history of a permanent discharge from the ear, a sudden onset with the occurrence of rigors, a variable temperature, repeated vomiting, optic neuritis, local œdema and tenderness over the mastoid (though this was often absent), tenderness behind the mastoid, and at the external occipital protuberance, and stiffness of the muscles of the neck. It was useless to operate unless the internal jugular vein was ligatured. If a case of pyæmia were met with, due to temporal bone disease without sinus thrombosis, he thought it should be treated exactly as if the latter complication were present.—Mr. THORNTON said that the cases were striking in the similarity of their symptoms and in the conditions found at the time of the operation. He wondered how far we should be justified in adopting as a rule of practice some more radical means of treating chronic ear disease so as to prevent them getting into such a serious condition.—Dr. MACNAUGHTON JONES believed that many of these cases were due to a small polypus unattended with much discharge, and extensive disease of the petrous bone might exist without any obvious external sign. In one case where he removed some diseased mastoid bone he accidentally perforated into the lateral sinus; he controlled the hæmorrhage by lint dipped into perchloride of iron, and the patient made a good recovery. If efficient early treatment for ear disease were adopted, there would be no necessity for these graver operations.—Mr. STEPHEN PAGET gave details of the case of a boy eight years of age, whom he had recently treated for the results of ear disease. He was admitted in a drowsy condition, with headache, shivering, and a temperature of 103°. Leeches were applied, a grey powder administered, and a Leiter's coil put on the head. This produced relief to the general symptoms, though the temperature remained high. He was trephined over the mastoid, but no pus was found there, and so a second trephine hole was made over the lateral sinus; a probe passed forwards and upwards let out pus and gas. Death took place on the following day, and the dura mater over the posterior aspect of the petrous bone was found sloughy and black, and there was a perforation leading into the lateral sinus; the latter, however, was not thrombosed. There were many minute hæmorrhagic infarctions in both lungs.

Dr. WILLIAM HUNTER then read the notes of a case of Pernicious Anæmia, which he had made the subject of a series of observations relating to its pathology, diagnosis, and treatment. The patient was a man aged fifty-nine, whose previous health had been good, and whose illness dated back to a period three years before his death. The onset was always referred to an exposure to unhealthy sanitary influences. From this time onward to the end the history was one of steadily increasing weakness, accompanied by certain throat and tongue troubles, and in the later stages by trouble with the bowels, attacks of diarrhœa being not unfrequent. Fever was not a feature of the disease. It was rarely present, and when so never rose above 100°. There was no uneasiness of stomach, and no symptoms referable to the latter in the later stages of his illness. In the earlier stages he suffered a little from retching and vomiting. Liver dulness normal. Splenic dulness slightly increased. The blood presented characteristic changes, the chief being a great diminution in the number of corpuscles, the last enumeration giving 760,000, with a percentage of hæmoglobin that remained relatively high throughout, sometimes even exceeding the percentage reduction in the number of corpuscles. Changes in size and shape were also observed. The patient towards the end presented a well-marked lemon-coloured appearance, which varied much in intensity from day to day. It was always most marked when, as shown by the increased quantity of pigments in the urine and fæces, blood destruction was specially increased, and it was accompanied by drowsiness sudden in onset, by a contracted state of the pupils, by slight fever, sometimes by perspiration, and always by free movements of the bowels. The whole series of phenomena pointed to the action of some toxic agent. At the necropsy the subcutaneous fat was bright yellow, and the liver, spleen, and kidneys contained blood pigment rich in iron. The tissues of spleen and liver became coal-black on being placed in sulphide of ammonium. The spleen was in addition enlarged, weighed 11½ oz., and presented a purplish congested appearance, soft and diffluent. The colour was due to the presence not of red corpuscles, but of hæmoglobin, and crystals of hæmoglobin were also found. No changes were found in the mucous membrane of the intestine, but the mucous membrane of the stomach showed evidences of a long-standing inflammation, at parts acute and subacute, resulting in thickening of the submucous coat, and of walls of vessels, with great increase in the connective tissue, and atrophy of the glands of the mucosa. Dr. Hunter's former conclusions as to the essentially hæmolytic nature of the blood changes in this disease were confirmed by observations on the urine during life, and the changes found in liver, spleen, and kidneys after death. The characters of the urine specially worthy of note were its high colour, acid reaction, low specific gravity, and undiminished quantity. In addition, cells and casts of renal origin, containing granules of blood pigment, had been found from time to time in the urine on microscopic examination, and the excretion of iron was greatly increased. All these characters pointed to an increased destruction of blood.

His further conclusion, that the destruction was effected by the absorption of poisons of cadaveric nature from the intestinal tract had also been confirmed in the present case. For he had isolated from the urine a ptomaine, identical apparently in all respects with putrescine, a body never found in the urine in health, and only hitherto found in one other disease—cystinuria. He desired to speak with all reserve as to the significance of this observation. He attached value to it as pointing to the presence of specific micro-organisms in the intestinal tract by whose agency it was formed, since it was never found in the urine as the result of the action of ordinary putrefactive bacteria in the intestinal tract. He connected the formation of this poison with the changes in the gastric mucous membrane, and considered that the most probable explanation of this and other similar cases was that a local infection of the gastro-intestinal tract had occurred, and that this was the essential factor necessary for the production of the special features of this disease. The various gastro-intestinal lesions so frequently found, including cancer of stomach &c., he regarded as important etiological factors favouring successful infection in the first instance, and its development in the second, but not in themselves the cause of the disease. The diagnosis was now in his opinion rendered comparatively easy, and rested on the change found in the blood and the associated changes in the urine and fæces; the blood presenting a deficiency in corpuscles with a high percentage of hæmoglobin, while the urine showed a high colour with a normal quantity and low specific gravity, there being occasional presence also of pigment granules. The presence of pathological urobilin was almost pathognomonic. As to treatment, the cause could only be removed in the early stages of the disease, and the best way to do this was probably to wash the stomach out thoroughly. The administration of β naphthol should be tried, as it possessed strong antiseptic properties. The symptoms should also be combated, the diarrhœa checked, and the condition of the blood improved by carefully regulating the diet and avoiding an excess of nitrogenous food.—The PRESIDENT said that in septic conditions following abdominal operations he had frequently seen black vomit; he had washed out the stomach freely and frequently, and patients had recovered. He had frequently observed changes in the colour of the urine in septic conditions after abdominal sections.—Sir HUGH BEEVOR referred to a case of pernicious anæmia in which the hæmoglobin percentage was proportionately much lower than that of the corpuscles. It should be borne in mind that many drugs were blood destroyers, and therefore the particular medicine given in any individual case should be remembered before judging of the nature of the case by the blood derivatives alone. In paroxysmal hæmoglobinuria small yellow pigment granules were excreted in the urine.—Dr. HUNTER, in reply, wished to emphasise the specific infective nature of the disease. The condition of the liver and spleen was valuable in diagnosis, the alteration of colour with ammonium sulphide being pathognomonic.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 13TH.

DR. GWYNNE, PRESIDENT, IN THE CHAIR.

Microscopic Specimens.—Excision of the Ankle-joint and Astragalus.—Radical Cure of Hernia.

DR. PEARSON showed some microscopic specimens: (1) A section of Lung from a case of Lobular Pneumonia complicating Typhus Fever; (2) the Bacillus Anthracis, cultivated in the blood of a mouse by inoculation from the blood of a sheep which had died of the disease in Siberia.

Dr. SINCLAIR WHITE showed a girl, aged three years, on whom he had performed Excision of the Anke-joint and Astragalus seven months previously. The operation was undertaken for strumous disease of twelve months' duration. The patient made a good recovery, and was able, with laced-up boots, to walk almost perfectly. The joint was opened by means of an anterior incision, and the divided tendons were reunited by sutures. The operator expressed his preference for this method of exposing the joint as giving a complete view of the diseased parts. He thought the operation was a valuable one, and ought to be performed for disease of bone more frequently than it is.—Dr. Martin, Mr. Pye Smith, and Dr. Gwynne took part in the discussion.

Dr. SINCLAIR WHITE also read a paper on the Radical Cure of Hernia, and showed two cases in which he had successfully operated. The first was a boy, aged six years, who had a large congenital hernia on the right side, which could not be kept up by means of a truss. He was operated on in September, 1889, by McEwen's method, and was apparently cured. The second case was that of an infant only four months old when operated on. He was the subject of a very large right congenital hernia, which was not amenable to a truss. He was badly nourished, always crying, habitually constipated, had had repeated attacks of thrush, and, if he had remained unrelieved, would, in Dr. White's opinion, have soon succumbed to the irritation set up by the hernia. He was operated on in December, 1889, by McEwen's method, and appeared to be cured of the rupture. Since the operation his health had improved wonderfully. Dr. White began his paper by alluding to the remarkable strides made in reference to this operation within the last decade. This procedure was now a recognised part of the operation for the relief of strangulation in cases where the vitality of the displaced bowel was intact. It had proved to be of much value in dealing with irreducible herniæ, and very large herniæ that could not be kept up by external support. Opinions were still divided as to the expediency of the operation in cases capable of being relieved by a truss. Before it could be accepted as a substitute for the inconvenience of wearing a truss it must be conclusively shown that the operation involved little risk to life, and that the majority of the cures effected were of a permanent character. The first condition was an established fact; and the operation might be considered to be one of the safest in surgery. The second condition could only be determined by following up the cases operated on, and this had not as yet been done sufficiently to allow of definite conclusions being drawn, although the accumulated facts were very promising. Dr. White then described the causes of hernia, and dwelt upon the importance of studying these in every case where the operation was contemplated. The various methods of performing radical cure were next alluded to, and preference given to the plan adopted by Dr. McEwen. Drawings and models were also shown to illustrate the subject of the paper.—Dr. Gwynne, Mr. Pye-Smith, and Dr. Pearson took part in the discussion which followed.

MARCH 27TH.

Old Hepatic Abscess. — Locomotor Ataxy. — Syphilitic Growth.—Aural Complications of the late Epidemic.—History of the Medical Societies of Sheffield.

Dr. ARTHUR HALL showed a specimen of old Hepatic Abscess from a female subject in the dissecting-room of the medical school. The abscess cavity was about the size of a cocoa-nut, and lined with a thick shell of calcareous material. It communicated above with the peritoneum and below by a sinus with the exterior. There were numerous old peritoneal adhesions. The diaphragm on the right side was pushed up as high as the third right rib. The base of the right lung was adherent to the diaphragm. The liver was small and the body much emaciated.

Dr. SINCLAIR WHITE showed an unusual case of Locomotor Ataxy in a man thirty-five years of age. The disease had existed for nine years. There were very severe gastric crises. The right pupil was twice the size of the left, but in this respect the pupils alternated; both were inactive to light, but active to accommodation; the discs, especially the left one, were congested; the patellar reflex was absent; sexual appetite lost; ataxia and perverted sensibility were limited to the ulnar half of the left hand and forearm; there was no history of syphilis.

Dr. WHITE also showed a case of Syphilitic Growth on the Dorsum of the Tongue in a man aged thirty-eight years. The growth was about the size of a shilling, and made up of hypertrophied papillæ.

Mr. C. ATKIN read a paper on the Aural Complications of the late Epidemic. After stating that middle ear affections had been more prevalent than would seem to be explainable by simply "catarrhs and sore-throat," he also ventured an opinion that the inflammation was different in its character and course. The attack often came on without anything wrong with the throat being noticed previously. It was very acute in character, often accompanied by hyperæsthesia of hearing at first, rapidly followed by diminution, especially to the watch. Blood-stained lymph was in some cases effused into the tympanic cavity, being more of the

fibrinous than of the corpuscular variety. The necessity of prompt treatment was urged: blisters, leeching; aconite, with instillations of warm anodyne drops; syringing, warm oil, glycerine, and quinine were regarded as positively harmful in these cases.—Mr. Snell, Dr. Sinclair White, Dr. Gwynne, and Dr. Martin took part in the discussion.

Mr. SNELL read portions of a history, which he had prepared, of medical societies in Sheffield down to 1889, when he retired from the secretaryship. He pointed out how the present Society was the descendant of active and vigorous societies. The Medico-Chirurgical Book Society was founded in 1834, and became merged in 1861 into the Medical Library (established 1858), and this latter became amalgamated in 1888 with the Medico Chirurgical Society. The most important ancestor of the present Society was the Medical Society of Sheffield and the neighbourhood, founded in 1841. For many years its prosperity was remarkable. Its proceedings were published regularly and fully in the *Provincial Medical Journal*, and this at a time when the number of societies, metropolitan and provincial, that did the same numbered but two or three. The communications made to the Society, many of which were published in full, give evidence of great care in preparation, and in many cases foreshadowed methods which have been adopted at the present day. The Medico-Chirurgical Society succeeded, after a brief interval, the Medical Society. It had had a prosperous career, and it was pointed out how satisfactorily growth in numbers had been attended with a corresponding increase in attendance at the meetings.—Dr. Gwynne, Mr. Arthur Jackson, Dr. Martin, Dr. White, and Mr. C. Atkin took part in the discussion.

Reviews and Notices of Books.

Food in Health and Disease. By I. BURNEY YEO, M.D., F.R.C.P. London: Cassell and Company.

THIS is another addition to the valuable series of Clinical Manuals published by the above-named firm. "The object of this series is to present to the practitioner and student of medicine original, concise, and complete monographs on all the principal subjects of medicine and surgery, both general and special."

The work is a very complete manual on the subject, but the question that arises in our minds, after a careful perusal of the volume, is whether the greater part of the treatise is not better adapted for the student of political economy or the public analyst than for those for whom it was intended. Portions of the book, indeed, could be read with interest by anyone, from the thoughtful housewife to the consulting physician; but, as stated above, these manuals are intended primarily for the student of medicine, and much might be left out without detracting from the practical value of the work as far as he is concerned; for instance, the fifty pages devoted to the Dietary of Prisoners and Soldiers might well be condensed. The portions devoted, however, to the consideration of Food in Disease and to the dietary suitable for the various periods of life are most complete and instructive, and we cannot speak too highly of them.

There has long been a want of a good work on Food. The student can find many excellent books on the drug treatment of disease, but he looks in vain for a guide to help him in the regulation of a patient's diet. How important this is in such diseases as dyspepsia, diabetes, or gout we need not say; and a manual on this subject will be welcomed by all classes of practitioners and students. The various diseases in which the diet is of first importance are taken seriatim, commencing with Feeding in Acute Diseases and Convalescence. Each chapter opens with a short account of the physiology and pathology of the organs most concerned, and thus the study of the diet is based upon strictly scientific grounds. For instance, the chapter on Diet in Anæmia, Chlorosis, Neurasthenia, and allied Disturbances of Nutrition commences thus: "The due and adequate nutrition of all the organs and tissues of the body and their maintenance in a stable state of normal functional activity are essentially dependent upon the integrity of the circulating fluid, the blood, which brings to each of them the elements necessary for the support of their structure and the development of their functional energies. Any defect in, or deviation from, the normal composition of the blood will therefore tend to disturbance and deterioration in the condition and functions of all the organs of the body; and it is obvious, and needs no demonstration, that the reception, digestion, and assimilation of a sufficient quantity of suitable food are requisite to maintain the needful healthy quality and quantity of the blood, and to restore them when lost. It is clear, then, that the morbid states of the blood, known as anæmia and chlorosis, cannot be successfully remedied without due attention to the diet." Short summaries of the diet suitable to the various disorders are then given, and this treatment duly enlarged upon.

We naturally turn with interest to Dr. Yeo's opinion of alcohol in acute diseases, and we find that he arrives at the following conclusions, with which we entirely agree: "Wine, wine and water, even beer, and the use of alcohol in various forms are, more or less, commended in the dietetic treatment of acute diseases by most experienced physicians; our own opinion, however, is that alcohol is not absolutely needed in the majority of cases of acute disease—viz., those cases that run an even average course, without urgent or alarming symptoms. We do not consider that alcohol should be given as a matter of routine in all acute diseases and in all stages of the disease; we prefer to hold it in reserve for the graver cases, or for the terminal stages of the average cases, when the exhausting effects of the febrile process become especially evident."

The student will derive much useful information from the chapter on the Dietetic Treatment of Diseases of the Digestive Organs. We fully corroborate Dr. Yeo's remark that "the tendency to restrict patients who suffer from gastric catarrh to farinaceous food is often a great error." The medical attendant's advice to take only a "milk diet" is often productive of more harm than good, and a warning of this kind may prove of much service to many students about to commence practice. We would also direct close attention to the short sections on the Dietetic Treatment of Constipation and Diarrhœa. In this chapter, as in others, the author quotes frequently from continental authorities, especially Niemeyer and Dujardin-Beaumetz. With regard to the diabetic dietary, Dr. Yeo arrives at a very simple and logical conclusion. "We must adapt our regimen to individual cases, and we must observe carefully whether the measures we adopt are well or ill tolerated by different patients. We should therefore frequently examine our patient's urine, and notice what influence is exercised on the amount of sugar excreted by different articles of food; we should also weigh our patients frequently to ascertain the effect of the dietary adopted on the nutrition of the body. If we follow this plan we shall discover that some diabetics may be permitted a much more liberal and varied dietary than others, and that measures which on theoretical grounds might appear necessary often prove practically undesirable."

The various systems for curing obesity are described at length. None of the methods are appropriate to the treatment of all cases of obesity indiscriminately, while any one of them may prove successful in suitable instances. To those readers who are especially interested in diseases of the chest, we recommend careful study of the article on Diet in Consumption. A very interesting chapter is that on Certain Special Dietetic Cures, the "Koumiss Cure," the

"Grape Cure," &c. The book concludes with an appendix on Hospital Dietaries and Invalid's Dietary.

The author in his preface says:—"I can only hope this book will be found to be what I have endeavoured to make it—a practically useful guide to the study of the important subject of dietetics." We think that Dr. Yeo is to be congratulated on having accomplished his desire; we became more and more favourably impressed with the work as we went through the various chapters, and we have no doubt that it will attain, as it deserves, a great success.

The Diseases and Disorders of the Ox, with some Account of the Diseases of the Sheep. By G. and Dr. A. GRESSWELL. London: Baillière, Tindall, and Cox.

THIS is perhaps one of the best of the popular books on the subject which have been published in recent years, and demonstrates in a most unmistakable manner the great advance that has been made in bovine and ovine pathology since the days of Youatt. Chapters are devoted to the anatomy of the ox, the different breeds of oxen, a general account of sheep, and the diseases of oxen and sheep. These chapters are written in a lucid, if rather prolix style, and contain pretty well everything that is necessary for the amateur to know. We cannot detect many serious errors, though some of the statements may be considered as disputable. For instance, when treating of cow-pox, the authors say that "at any rate it seems to be established beyond doubt that they [cattle] may get it from the direct contact of the hands of a milker who is suffering from small-pox. ..... It seems highly probable that cow-pox is nothing else than small-pox communicated to the cow from man, and therefore deprived of its virulence." On the contrary, it may be truly said that many years' investigation has failed to afford an undoubted instance of cow-pox being produced by the manipulation of a milker affected with small-pox; and the converse reproduction of small-pox from cow-pox is also practically unknown. It might, indeed, be thought that the transformation of cow-pox into small-pox in mankind should be assuredly effected if the above notion is well founded, for the virus, when retransferred to its original soil, ought readily and quickly to induce its markedly characteristic effects—so very different from those which invariably indicate the presence of cow-pox, whether in the human subject, the horse, or the cow. We are quite aware that the statement of our authors is one in accordance with current belief, and one which has the strong support of certain facts as those of Ceely and Badcock. But no one can say that the question has been *proved* either one way or the other. For the same classes of facts are utilised in support of their respective arguments by those who believe variola to be identical with vaccinia and by those who do not think such identity to be proved. A long account is given of scarlet fever in man, and the relations of the so-called "Hendon disease" to that disorder; but no more light is thrown on the vexed question whether there is really a bovine malady which will give rise to scarlatina in our own species. To medical men who desire to know something of the disorders of such an important animal—speaking hygienically—as the ox, the work can be recommended, as the authors had evidently in view the advantages to be derived from treating them, whenever possible, from the standpoint of comparative pathology.

OUR LIBRARY TABLE.

Eczema and its Treatment. By M. J. RAE. London: J. & A. Churchill. 1889.—In this little treatise, in somewhat less than 200 pages, Dr. Rae endeavours to set forth the manifold aspects of the disease with their diagnosis and appropriate treatment It can scarcely be called an original work, but the author has studied the writings of all the chief authorities, and has stated their views succinctly, fairly, and critically, giving his own conclusions from the survey. While we do not agree entirely with his statements, the work as a whole is trustworthy, and gives a clear account of the disease. The weak portion of it is the chapter on diagnosis, which in a monograph could have been expanded with advantage, and many points might be more accurately stated. The chapter on treatment is full and well written, and the writer has shown a wise eclecticism in his selection of methods of treatment and formulæ from the chief authorities; but he is not always sufficiently explicit in the way in which the remedies should be employed, for those of his readers who may have had but little experience in the treatment of diseases of the skin. If, however, the concluding chapter, which gives a summary of local treatment for the various forms of eczema, be carefully read in conjunction with the one preceding, the practitioner will find in Dr. Rae's monograph many useful practical hints. On the whole it is a reliable guide in the treatment of a disease which often taxes the resources and ingenuity of the most experienced dermatologists.

Transactions of the American Gynæcological Society for 1889. Vol. XIV.—This volume contains a large number of papers on various subjects, the largest share being taken by those dealing with abdominal section. There is scarcely so much work in the volume as might be expected, the majority of the papers being of a somewhat general character, and rather more like opening speeches in a discussion than scientific treatises. Among the best papers are the following: A Digest of Twenty Years' Experience in the Treatment of Uterine Cancer by Galvano-cautery, by Dr. John Byrne; A Case of Abdominal Lipoma, simulating Ovarian Tumour, by Dr. Reeves Jackson; Death from Visceral Affections after Ovariotomy, by Dr. Henry C. Coe; Notes on the Pernicious Vomiting of Pregnancy; and Some of the Limitations of Galvanism in Gynæcology (including the results of some experiments concerning the action of galvanism on various substances and tissues), by Dr. Willis Ford.

Year-book of Pharmacy for 1889. London: J. & A. Churchill. 1889.—The present volume comprises abstracts of papers relating to pharmacy, materia medica, and chemistry, and, as usual, the record ceases with the end of June. The Transactions of the British Pharmaceutical Conference occupy perhaps rather more space than they deserve from their intrinsic interest, although it is an advantage to have in permanent form such papers as that of Professor Fraser on the Chemistry of Strophanthus Hispidus. Some few additions to the unofficial formulary of the "B.P.C." are appended at the end of the volume. As an index to the pharmaceutical literature between July, 1888, and June, 1889, the present issue worthily maintains the standard previously attained.

Proceedings of the New York Pathological Society for the Year 1888. Printed for the Society. 1889.—These "proceedings" contain several cases of interest, but perhaps the most notable feature of the volume is the Middleton Goldsmith Lecture, by Dr. J. M. Da Costa, on the Relations of Diseases of the Kidneys, especially Bright's Disease, to Diseases of the Heart. A memoir of Dr. Middleton Goldsmith, one of the founders of the Society, is appended from the pen of Dr. J. C. Peters.

Endoskopie und Endoskopische Therapie der Krankheiten der Harnrohre und Blase. Von Dr. EMIL BURCKHARDT. Tubingen: H. Laupp'schen Buchandlung. 1889.—We must be content to draw attention to this really valuable monograph by one who has mastered the art of endoscopy and put it to good service. It is based upon the careful study of a large number of cases of urethral and vesical

disease, which are related in a systematic manner, and the numerous coloured plates illustrate the text most admirably. It should prove of great use to the practical surgeon, and its author deserves credit for the pains he has bestowed on ts preparation.

The Universal Clinical Charts (Reynolds & Branson, Briggate, Leeds), for recording the temperature, pulse, &c., are designed to meet the cases in which registration of temperature twice daily is insufficient. Each sheet provides for the records of twenty-one days, and also indicates the periods of seven days. They are also suited for the register of morning and evening temperatures.

Analytical Records.

JOSEPH MACK'S AUSTRIAN PINE PRODUCTS (PINUS PUMILIO).

(JOSEPH MACK, REICHENHALL, NEAR SALZBURG; AND HEARN-STREET, CURTAIN-ROAD, LONDON.)

WE have received and examined seven preparations made from the essential oil of the *Pinus pumilio*. In each the highly aromatic and valuable terpine was found, and each was well prepared and suitable for the special purpose for which it was devised. No. 1, the essence, is evidently the pure hydrocarbon oil. It is recommended for fumigation and inhalation in affections of the throat and lungs, and also as liniment in the treatment of gout. No. 2, described as "Mack's anti-rheumatic bath," is said to be made from the soluble residue left after the essential oil has been removed by distillation. It is obviously of the nature of a balsam, and is intended for addition to a warm bath (96° to 100° F.) for the relief of rheumatism, and also for vaginal injections in leucorrhœa &c. No. 3 is a tincture; No. 4, capsules; No. 5, jujubes; No. 6, a syrup, apparently containing glycerine; and No. 7, a white clean soap, free from excess of alkali. There is no longer any question as to the value of these new remedies, and we commend them to the notice of the medical profession.

VIN DE BAUDON (ANTIMONIO-PHOSPHATE).

(W. A. MASSINGHAM, 16, UNION-COURT, OLD BROAD-STREET.)

This is a sweet wine, containing phosphates and antimony in notable quantities. Our analysis gave in parts by weight: Total solids, 17·97; ash, 0·6; alcohol, 9·36; equal to 20·35 per cent. of proof spirit. It is said to be valuable in phthisis and strumous disorders, and claims to be greatly superior to cod-liver oil.

FROZEN BEEF-TEA.—FROZEN CREAM BEEF-TEA.

(THE HORTON ICE-CREAM CO., LIMITED, 56, GRAY'S-INN-ROAD; AND 56, QUEEN'S-ROAD, BAYSWATER.)

As far as we know these are entire novelties, and they are certainly valuable. The frozen masses of beef-tea, with and without cream, are supplied in refrigerators, in which they remain unaltered for many hours. They are delicate in flavour, and could be taken by many patients who would refuse food at the ordinary atmospheric temperature. We cannot find any trace of adulteration or of chemical antiseptics, and believe the ices to be perfectly natural and pure.

KILOH'S OLD IRISH REINDEER WHISKY.

(M. J. REILLY, 6, ADAM-STREET, ADELPHI.)

Irish whisky has gone somewhat out of fashion in England of late, for what reason it is difficult to guess, unless it be that a good deal of rubbish, or worse than rubbish, has been thrown on the market. The Reindeer whisky now submitted to us is certainly a well-matured and wholesome spirit which can safely be commended. The sample examined by us contained in 100 parts by weight 42·15 of alcohol, equal to 87 per cent. of proof spirit, 0·15 of solid residue, and 0·04 of ash. Like all good Irish whisky, it has a bouquet not altogether unlike that of brandy.

SPARKLING AROMATIC QUININE WATER.

(H. & T. KIRBY & CO., LIMITED, NEWMAN-STREET, LONDON.)

This preparation yields quinine easily by the ordinary tests, and is said to be aerated with natural carbonic acid gas. It is made by the Britannia Fruit Preserving Co., Limited, Tiptree, Kelvedon. When treated with potash and ether it gives a brilliant pink colour not unlike that of alkaline phenol-phthaleine.

SOLUBLE SANITAS OIL, MISCIBLE WITH WATER, OILS, PETROLEUM, FATS, AND WAXES.

(THE SANITAS CO., LIMITED, BETHNAL-GREEN, E.)

A brown syrupy liquid, which burns like camphor with a smoky flame. Dropped on warm water, it emits a pleasant aromatic odour. With the chromic acid test the well-known sky-blue colour of peroxide of hydrogen slowly develops. This is another and very useful addition to the already long list of sanitas preparations.

GINGER ALE, DIAMOND COMPANY BRAND.

(M. J. REILLY, 6, ADAM-STREET, ADELPHI.)

We can only say of this ginger ale that it is well made and bright, and gives the reactions of genuine ginger.

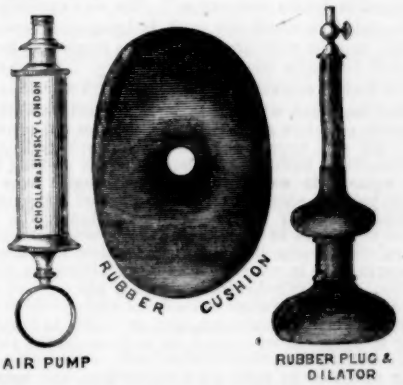
BENGER'S PEPTONISED BEEF-AND-CHICKEN JELLIES.

Messrs. Mottershead and Co. have lately introduced a great improvement in the method of putting up and sending out Benger's Peptonised Beef-and-Chicken Jellies—which have been already noticed in THE LANCET—by using glass jars instead of tins, whereby the possibility of metallic contamination is avoided, and the contents can be seen and their condition judged of without opening the jar.

New Invention.

A PLUG AND DILATOR FOR USE AFTER THE OPERATION FOR INGUINAL COLOTOMY.[1]

THE accompanying diagram represents a vulcanised india-rubber bag and pad made for me by Messrs. Schollar and Simsky, of 64, Praed-street, Paddington, which I trust will prove of service in cases that have been operated upon for inguinal colotomy.



Object.—The intention of the above is twofold:—(*a*) As a *plug* to close the artificial anus, thereby preventing the escape of fæcal matter, and at the same time maintaining the patency of the anus; (*b*) as a *dilator* of any cicatricial

[1] Exhibited at the Harveian Society of London on March 20th, 1890.

contraction of the margin of the artificial anus that may occur.

Construction.—This irregularly shaped vulcanised india-rubber bag consists practically of an upper and lower expansion united by a central narrower neck, the whole being dilatable by means of an air-pump. In the cervical portion the rubber is twice the thickness of that of the terminal expansions, which for obvious reasons facilitates the introduction of the appliance and augments the dilating power of the cervical portion.

Adaptation.—Pinch up the lower flexible expansion, and introduce it within the margin of the artificial anus, then release it, and the lower end will at once expand and become self-retaining. The dilating cervical portion will now be found well placed, surrounded by the margin of the artificial anus. If the appliance is to be used as a *plug*, place a layer of absorbent antiseptic wool around the neck of the plug and the lower part of the upper expansion, to absorb any moisture; then thread the stopcock tubing and upper flexible expansion through the central hole in the soft rubber pad, inflate with the air-pump to the requisite degree of distension, and turn the stopcock off. If used as a *dilator*, simply inflate the bag as above, omitting the application of the pad.

Removal.—Turn the stopcock on, allow the air to escape, and remove the bag by adequate traction and manipulation.

Advantages claimed for this appliance.—It is (1) self-retaining, (2) painless during adaptation, (3) of pliable and washable material, (4) easily introduced and removed, (5) uniform in its circular dilating power, and (6) of moderate cost. Messrs. Schollar and Simsky inform me that they can supply the air-bag, pad, and air-pump for half-a-guinea inclusive. The bag and pad must be made of a size to suit individual cases. I would note, however, the necessity of having the cervical portion made sufficiently long, and the thickness and breadth of the pad not too great, else the mutual adaptation of these two parts will be found impracticable. The pad is best filled with air.

H. CRIPPS LAWRENCE, L.R.C.P. Lond.

HALIFAX NEW INFIRMARY.

THE people of Halifax seem to be wisely determined that the new infirmary which they are about to build shall be constructed after the best possible model. We have received copies of the instructions which are being issued to the competing architects, and our "most candid" criticism is invited, because, as the accompanying letter states, "it is far better to know our faults while they are on paper than only to find them out when they have become stereotyped in bricks and mortar." We may candidly say that the spirit in which the work is being commenced is excellent, and the wide circulation of the rough idea is well calculated to make the end satisfactory. The general design is that of one-storeyed pavilions, with a six-foot dry concreted basement, which is to be continued beneath the connecting corridors as well as the pavilions themselves. This is the plan upon which the Johns Hopkins Hospital at Baltimore is built, and of course there is nothing to be urged against it except expense, although, from the hygienic point of view, it is doubtful whether a damp-proof and concreted floor is not as good. Again, the only possible objections to one-storeyed pavilions are those of expense, the greatly increased area which the hospital occupies, and the increased cost of maintaining the edifice hereafter. The hygienic disadvantage of placing one ward above another is minimised or rendered negligeable if care be taken to place all staircases, lifts, or shoots in buildings having independent ventilation, so as to avoid the risk of foul air drifting from floor to floor, and to ensure that all the air admitted to each ward comes from the open air direct. Each pavilion is to contain twenty-two patients, of whom twenty will be in a large ward. This is rather an extravagant unit, and must involve a large and expensive nursing staff. Miss Nightingale's opinion was that thirty-two was a practicable and economic unit, from the point of view of supervision and nursing. It need not be urged that this is a most important point, for those who build hospitals are bound to look ahead and consider the cost of maintenance and management hereafter.

Each patient is to have 116 feet of floor space, with a distance of 8 feet for each bed and its interval, and a total of 1500 cubic feet of space. From these figures we gather that the wards will be 80 ft. long, 29 ft. wide, and 13 ft. high. This is a very good shape, although we think that it would be well to increase the distance between the beds at the expense of the other dimensions. The value of cubic space and floor space is very much in proportion to the degree to which the heads of the beds can be separated, and we believe that the best shape for a ward is that of a long gallery with the beds as far apart as possible. All sanitarians are agreed that there is no advantage in having a ward more than 12 ft. high, and there are of course very obvious advantages, from the point of view of cleaning and window management, in having the wards as low as possible. If the windows reach the very top of the walls, the architect need be under no apprehension of producing a poor effect; in fact, the most attractive rooms we know are the old-fashioned Tudor galleries with high windows and well illuminated ceilings. It cannot be very pleasant for the occupant of a hospital bed to have a bad case—possibly dying—in the next bed to him. This discomfort is minimised by increasing the intervals between the beds, and it must be remembered that large floor space or cubic space, unless it increase the intervals between the beds, is of comparatively little use. This is the weak point of the circular ward, as we have often pointed out. The wards are to have windows on both sides of course, and we should like to see the experiment tried of having the windows on opposite sides not facing, but alternating with each other. But for the 6-foot basement it would be easy to provide each ward with a good wide verandah, into which, in suitable weather, the beds might be wheeled, and thus give to a certain class of chronic cases the inestimable benefit of real fresh air. The designs are to comprise thirteen large and three smaller pavilions, with an administrative building, nurses' house, &c. It is not intended to build much more than half at present, the rest being left for future consideration; and as the committee have wisely secured thirteen acres of land, there will be no difficulty as to any reasonable extension hereafter.

It is a common fault in hospitals that enormous space is given where space is not wanted, and architects seem to forget that the difficulty of renewing the air is very much in proportion to the amount enclosed. We very often see waterclosets and storerooms having an area and height which are enormously in excess of the requirements, and which merely serve to increase the cost of construction, cleansing, and maintenance, with no countervailing advantage. A really clever architect will avoid these evils, and will at the same time increase rather than diminish his architectural effect. The administrative and central building is to have a basement and three floors. According to the schedule which has been issued, the building will contain some 24,000 feet of floor space, of which 2400 feet are to be in the basement, about 15,000 on the main floor, 2000 on the first floor, and about 5000 on the top floor. The architects are not to be absolutely guided by the schedule, which is lucky, for otherwise the construction of the main building would present some mechanical difficulties. On looking through the schedule, it seems to us that insufficient space is allotted to the casualty department and dispensary, and we would point out that the post-mortem room is smaller than the house surgeon's bedroom.

LITERARY INTELLIGENCE. — Since the death of Professor Botkin, the journal edited by him, the *Ejenedélnaya Klinicheskaya Gazeta*, or Weekly Clinical Gazette, which has frequently been quoted in THE LANCET, has ceased to exist. In its place, however, a similar journal has been brought out in a somewhat different form, entitled the *Bolnichnaya Gazeta Botkina*, or Botkin's Hospital Gazette. The first two numbers which have been sent us contain, in addition to other articles, an account of the eminent physician's illness, and a well-executed engraving of him. The responsible editor of the new journal is Dr. Vasilieff, Professor Botkin's son, Dr. S. S. Botkin, being one of the members of the staff. Professor Curschmann of Leipsic will take Professor Unverricht's place on the editorial staff of the *Fortschritte der Medicin*.

THE LANCET.

LONDON: SATURDAY, APRIL 12, 1890.

THE new Code which has just issued from the Education Department, together with the instructions to inspectors by which it is accompanied, cannot fail to produce a marked effect upon the work of elementary education. As to whether the effect will be altogether such as is expected and desired, it would perhaps be rash to foretell; but we do not hesitate to say that we look forward with hope to a good result from its adoption and operation. The aim of the Department in putting forward this new code has been, speaking generally, to free the hands of teachers, and to enlarge the scope of their educational work. These are objects for which the teachers themselves have long been working, and we gather that the prevalent feeling among them is one of satisfaction with the new regulations. So far that is well, for it is a very large factor in the success of such a work as that of the education of children that the teacher to whose hands the task is confided should be able to work under congenial conditions. But there are other things to be considered besides even the public opinion of the teaching craft. The matter of prime importance is the interest of the children themselves, and, among the children, of the average child. In the work of education two processes which are to some extent antagonistic are concurrently carried on—the processes, that is to say, of developing and of shaping the young individual. The process of developing his faculties, either mental or physical, may be, and sometimes is, carried on to the detriment of that pruning and moulding process which fits him to fill and fit into a place in the ranks of society. Hence that exuberant individuality, which, striking and even admirable as it is from some points of view, would, if it were universally manifested, make social intercourse all but impossible. On the other hand, the pedagogic fault has, in fact, more usually been in the other direction, and has consisted in a tendency to repress and discourage distinctive features, and to coerce the pupils into conformity to one type, as if youthful humanity were so much molten metal to be cast in a mould. The fault, which we have here attributed to schoolmasters, is eminently the fault of educational systems as such, and we take it to be the greatest merit of the proposed Code that it embodies a serious attempt to eliminate this vice from the official directions under which our elementary teachers are called upon to do their work. The aim, as authoritatively stated, of the framers of the new Code has been to permit more freely than heretofore of the classification of pupils according to their attainments and abilities, thus enabling the teacher to adapt his instruction more accurately to individual requirements; to encourage the teaching of drawing and elementary science, subjects which if properly taught are eminently calculated to call forth the faculties of scholars and to offer such a choice of special subjects over and above the curriculum of elementary matters which must be embodied in the course of every school as will enable the influence of local requirements and local sentiment to make itself felt in the school management. All these seem to us to be admirable objects, and we see no reason to question the wisdom of the steps by which the department proposes to arrive at its destination. It is a condition, almost a part, of such a reorganisation of the method of teaching as is contemplated by these new regulations that a larger confidence than heretofore should be reposed in the teacher himself. It is appropriate, therefore, that they should contain provisions adapted to secure and enhance the efficiency of the teaching staff. But we think that the true way of securing personal efficiency is to give to the men and women actually employed about the work as large a measure of self-direction and self-control as is consistent with fair uniformity of standard in the average work of teaching. Qualifying examinations are necessary, but they can never afford anything more than a preliminary test of efficiency. The true test of competency is to be found, in this as in every other department of human labour, in successful work. The highest function of a successful inspection is to determine the calibre of the teacher whose work is being overhauled, and when in this way it has been satisfactorily proved that the teaching staff is and remains efficient a very large confidence in all the details of the daily work is their due. Only thus is it possible to avoid that condition of strain—overwork as it is commonly though perhaps not quite accurately called—in which neither teacher nor taught can participate to advantage in the common task. It is one of the lesser benefits of the new scheme that, by augmenting the proportion of teachers to scholars and by improving the conditions under which pupil teachers may receive instruction, it promises to diminish directly as well as indirectly the pressure of educational work.

ON another page will be found the last of the Lumleian Lectures, which were recently delivered to a large and distinguished audience at the Royal College of Physicians by Dr. HUGHLINGS JACKSON. The subject selected—Convulsive Seizures—is one which he has made peculiarly his own. It is now more than a quarter of a century since the clinical and pathological study of cases of convulsion due to gross local organic disease of the brain—now almost universally known as "Jacksonian convulsions"—led Dr. JACKSON to enunciate the doctrine that the Rolandic region of the brain was "motor," and that in it the movements of the different parts of the body were represented. To this it was objected by physiologists that the cortex in this region could not be excited by the stimuli then employed, but a few years subsequently the excitability of the dog's brain by suitable stimuli was demonstrated by HITZIG, and a little later the brilliant researches of Dr. FERRIER established the accuracy of Dr. JACKSON'S equally brilliant deductions. These lectures will, therefore, be read with the greatest interest as containing the latest views on the subject, to which their author's riper experience have led him. He begins by considering convulsions arising in the different "levels"—i.e., the bulb, the so-called "motor area," and the pre-frontal region of the brain. As lowest level

fits, beginning in the grey matter in the floor of the fourth ventricle, or around the aqueduct of Sylvius, Dr. JACKSON would class respiratory fits such as those seen in asphyxia, and toxic fits such as those produced by camphor, and perhaps some uræmic fits. He suggests also that possibly the convulsions occasionally accompanying the onset of infantile paralysis are of this nature, being due "to the action of ptomaines, the result of disintegration of nervous matter of the anterior horns on the ponto-bulbar centres."

Middle level fits, or "Jacksonian" or "epileptiform" fits due to discharges taking place in the "motor region" of the brain, are treated at much greater length. A most graphic account of such a fit is given, and the various stages are analysed. Each convulsion is regarded as originating in an unstable condition of a few nerve cells in a particular part of the motor region, and the lecturer believes that this instability is owing to an unduly free interchange occurring between the contents of the cell and the surrounding fluid that bathes it, leading to an "alteration in composition while its constitution remains the same." As an illustration of instability being produced by such a change in composition he instances the formation of the explosive nitro-glycerine from the stable glycerine, without alteration of its constitution, and suggests that in the nerve cells "phosphorous compounds become more nitrogenous or nitrogenous compounds more nitrogenous." These unstable cells not merely suddenly evolve energy, and so initiate a convulsion, but act like a detonator, and cause surrounding stable cells also to discharge energy, and the more violent the original evolution of energy from the unstable cells, the more widespread will be the convulsion due to the induced instability of surrounding healthy cells. Dr. JACKSON supports his theory with some anatomical observations. Convulsions of the arm almost always begin in the thumb, those of the leg in the great toe; and it has been shown by BETZ, and also by Professors SCHÄFER and HORSLEY, that the cells supplying these parts of the limbs are smaller than those of the others, and, consequently, will expose a relatively greater surface for interchanges with the surrounding nutrient fluid. The movements which result from this sudden liberation in the cortical cells do not vary in character from those voluntarily produced, but differ from them in the absence of melody and harmony; so that there is, for instance, in the tonic stage, "but one rigid state of the musculature of the hand and arm, and in the clonic stage, but a succession of such states," and in a general epileptic fit there is "the mad endeavour of the highest centres to develop the maximum function of every part of the body, animal and organic, and of all parts at once." Following this excessive and almost simultaneous liberation of energy on the part of nervous elements comes a period of exhaustion, indicated by temporary paralysis of the part convulsed, this exhaustion, as Dr. JACKSON believes, affecting not merely the nerve cells, but the fibres passing down from them to the spina centres, so that the deep reflexes are exaggerated in the temporarily paralysed and flaccid limb, from loss of control by the higher centres over the anterior cornual cells. It is to a similar exhaustion of the highest level, the pre-frontal region, that the Lumleian lecturer looks for an explanation of the highly complicated actions that are often performed by patients while still in a state of unconsciousness after a general epileptic fit. One of the most interesting forms of paralysis after epileptiform fits is the partial aphasia which frequently follows convulsions affecting the right arm. Here, although ordinary movements of lips, tongue, palate, &c., can be readily carried out, the patient is quite unable for a time to effect the necessary delicate movements for expressing himself in words, unless it be in a few simple monosyllables, such as "Yes" and "No." Here Broca's convolution is exhausted, but the movements of lips, tongue, &c., are still carried out because they are innervated from both sides of the brain, as Dr. BROADBENT long ago suggested. Dr. JACKSON'S remarks on the connexion between the physical processes of speech and the psychical processes involved in the production of words are in the highest degree interesting and important, and his sentences are so suggestive that they will not bear condensation, and require to be read and re-read carefully in the full report of the lectures. With regard to highest level fits, those beginning in the pre-frontal region, Dr. JACKSON said but little. He indicated his firm belief that these regions are motor, and that it is in this region that the convulsions of idiopathic epilepsy have their rise. It has been objected here also that these regions are not excitable by external stimuli; but he amends this objection by saying "*not yet* excitable"; and this view must for the present be considered an unproved hypothesis. We can here necessarily give merely a rough sketch of the topics treated in the lectures, and a close and repeated study of the full report is necessary to form any idea of the closeness of observation, the clearness of argument, and the marvellous powers of induction of which they are the outcome. We congratulate Dr. HUGHLINGS JACKSON on the production of such an invaluable contribution to the accurate study and correct interpretation of convulsions.

THE history of Lithotrity is chiefly remarkable for three great epochs which will always be associated with the names of CIVIALE, BIGELOW, and KEEGAN. To CIVIALE belongs the honour of introducing the operation and of so elaborating it as to commend it to surgeons generally. He carried to great perfection the art of merely crushing a stone in the bladder. Improvements in detail were effected by Sir HENRY THOMPSON and others, but the operation designed and practised by the great Frenchman maintained its supremacy until BIGELOW'S splendid complement of complete evacuation was introduced. This was the second striking development of the operation, which largely extended its area of usefulness, lessened its immediate dangers, and improved its ultimate results. It has, however, been reserved for India—that unrivalled field for experience in this branch of surgery—to furnish the fullest development of the operation by its extension to the cases of young children, and to Surgeon-Major KEEGAN the honour of this step is mainly due. These three epochs have followed in natural and inevitable sequence. The first essential of the operation was to crush the stone completely, safely, and expeditiously. This was done by CIVIALE. To remove the fragments was only possible after

good crushing, and this process was facilitated by the use of larger urethral instruments than CIVIALE would have thought possible. And while the artificial removal of the débris enabled BIGELOW and others to deal successfully with larger stones than had been formerly submitted to crushing, it was reserved for Dr. KEEGAN to see that BIGELOW'S modification rendered the operation suitable for young children, and to carry it out in them with the most gratifying success. In the *Indian Medical Gazette* for January and February Dr. KEEGAN has published a valuable paper giving particulars of all his stone cases, but especially of those performed by BIGELOW'S method in young children. Putting all his cases together, both those previously published and his subsequent series, he has a total of 110 litholapaxies of boys under sixteen years of age, with three deaths, or a mortality of 2·7 per cent. Or, if the published records of other surgeons in India are taken as well, the total is reached of 246 cases of litholapaxy in children, with six deaths,—a mortality of under 2·5 per cent.

With his enlarged experience of the operation Dr. KEEGAN is more firmly persuaded of its safety and possibility, and of its advantage over the other methods of dealing with stone in the bladder. By improved manufacture, lithotrites of sufficiently small size, but of great strength, have been produced with which any ordinary stone can be crushed. When well crushed, the fine débris readily passes through the evacuating tubes, which can be safely and easily introduced along the elastic urethra of a boy; and the absence of enlargements of the prostate, and of pouchings and irregularities of the bladder, as well as the good muscular tone almost invariably met with in boys' bladders, render the evacuation of every fragment of the calculus both more expeditious and more certain than in elderly men. The number of cases collected by Dr. KEEGAN puts the feasibility of this operation in young children beyond all question; and the remarkable success obtained in India, where the mortality has been under 2·5 per cent., shows that in good hands it is *the* operation for children as well as for adults, and that only under special circumstances should lithotomy, whether supra-pubic or perineal, be resorted to. To obtain full success in the operation one or two points must be attended to. In the first place, familiarity with the operations of crushing and of evacuation must be acquired in adults if young children are to be well dealt with. And therefore a surgeon who has not acquired this familiarity should resort to lithotomy rather than expose a very youthful patient to the risks of an unskilful use of the lithotrite and evacuator within the narrow limits of a child's bladder. It is also essential to have thoroughly suitable instruments. Dr. KEEGAN uses what he calls a "battery" of lithotrites varying in size from four and a half upwards, and all of them fully fenestrated. All who use the ordinary lithotrites know how essential it is to have them of the best manufacture, and this becomes of greater importance still when they are of very small size.

In reference to the mortality of the operation, in no one of Dr. KEEGAN'S three fatal cases was the issue directly connected with the operation. In two of these cases the kidneys were almost entirely destroyed, the dilated pelvis and calyces being filled with pus, the pyramids completely degenerated, and the cortex very largely disorganised. In the third case no necropsy was allowed, and it is impossible to speak so positively of the state of the kidneys; but there is good reason to think that they were in a state very similar to that of the others; and, in addition, there was an abscess in the right iliac fossa before the operation was undertaken. The entire absence of accidents from injury to the bladder or urethra is certainly very striking when we remember that Dr. KEEGAN attempted, in 1881, what had always before been considered as impracticable because of the small size and the delicacy of these parts in children.

Some doubt has been expressed as to whether the results of operation in India afford a safe guide for practice in Europe. But there seems to be no justification for such a doubt. It is not long ago that some surgeons held that lithotrity could not well replace lithotomy in India—partly because lithotomy was so successful, partly because the native races would not endure the more prolonged and delicate manipulations of lithotrity. Such a fear has been shown to be groundless; but, on the other hand, there is no evidence that the native races of India are less sensitive than Europeans, or better subjects for an operation, or that they seek for relief at an earlier stage of the disease when the urinary organs are less seriously affected. Indeed, if there be any advantage on either side, it seems to lie with Europeans.

Dr. KEEGAN'S table of cases includes instances of quite small calculi, and he does not accept Sir HENRY THOMPSON'S limit of a weight of twenty grains as that below which there is no stone. Dr. KEEGAN regards all calculous formations that do not spontaneously pass out of the body as "stones," and any procedure for their removal as an operation for stone. We cannot help thinking that in reference to stones or tiny concretions a distinction is to be drawn between those that can be simply washed out of the bladder and those that must undergo previous crushing. Dr. KEEGAN'S paper contains a table of his last hundred cases of stone in the bladder, in which the main facts of each case are clearly given. The whole paper is one of great value and interest, and we heartily congratulate him and his colleagues in India, on having achieved for litholapaxy so wide a field of usefulness and with such brilliant results.

IN view of the approaching biennial festival of this College on Thursday, the 17th inst., we may remind our readers of some of the purposes served by the institution. It has a twofold aim. It is an educational establishment in the same sense as other public schools, and provides a mental training of the highest order. It may be affirmed that among the many teaching centres in England there is none which possesses a higher claim to public esteem than Epsom College. But its aims are higher than those, for it exercises the further function of affording invaluable aid to those dependent on members of the medical profession. It provides for the education and maintenance of fifty foundationers, and consequently is entitled to the support and pecuniary contribution of every legally quali-

fied medical practitioner in the kingdom. The subjects in the syllabus embrace those generally set down under the heads of classical and modern education respectively, as well as those needed for the preparation of boys for a mercantile calling. Particular attention is paid to the instruction suited for ultimate graduation in medicine, and for each of the public services. This is not the first occasion on which we have expressed our unqualified approbation of the noble scheme which Mr. PROPERT originated. Our opinion of its objects may be gathered from a quotation on its initiation from THE LANCET of May 3rd, 1851. "The proposed College ought to supply an excellent education, and in this way it would become an inestimable boon to the profession, but to distinguished scholars it ought to give the means of proceeding to the University and wresting some of that fame and emolument which now seems the prescriptive rights of the other professions. We wish the proposal of Mr. PROPERT godspeed."

That our anticipations of the work of this College have been fulfilled during the past thirty-five years no one who knows the inner working of the school will venture to doubt. We need hardly refer to the fact that Epsom, consistently with its foundation, offers unusual facilities to youths about to enter upon a course of medical study. Thanks to the liberality of several of the London hospitals, the right of becoming a free student in medicine is annually afforded to nine pupils of the College who shall have passed satisfactorily one of the entrance examinations at the London University. These points, as well as the history of the institution, are set forth in detail in an article which will be found on page 818. It will be seen that the successes attained by the pupils have been highly creditable alike to teachers and taught. It must not be supposed, however, that medical interests are alone considered at Epsom. On the contrary, the College Council fully recognise the evils connected with a class school, and, while retaining the original foundation, have so shaped their system as to suit the requirements of all sections of the community, a proportion of the boys at present at the College being the sons of others than medical men. The benevolent purpose of the College consists in providing free education for fifty boys, chiefly necessitous orphans of medical men; seven foundation scholarships, the gift of Mr. FRANCE, for female orphans of medical men (at the School of St. Anne's Society); and fifty annuities, some with residence at the College, for aged and poor medical men, their widows or daughters. It will thus be seen that the claims of the College upon members of our profession are peculiarly strong. We may therefore confidently expect that the appeal which will be made on Thursday for aid in carrying on the benevolent section of its work will meet with a ready and a generous response. It should be a point of honour with every practitioner in the country to see that the work of the College, efficient and successful as it is in point of education, should not through any want of interest on his part be shorn of half its usefulness by losing its power to help the poorer members of the medical brotherhood. The cause it represents is too great and good to admit of a suspicion of the possibility of such a misfortune.

Annotations.

"Ne quid nimis."

THE MONOPOLY OF HOSPITAL APPOINTMENTS BY ENGLISH QUALIFICATIONS.

REVERTING to Mr. Stewart's address to the Ulster Medical Society on the Disabilities of Irish and Scotch Diplomates for Honorary Staff Appointments in English Public Hospitals, we note that there are 1500 medical diplomates of Ireland practising in England. It is impossible to justify, in the present union of the three countries and in the present state of medical law, the monopoly of staff appointments by those holding English qualifications, and we wish entire success to the abolition of all territorial distinctions. If there still remain inequalities of stringency in the examinations of different divisions of the kingdom for corresponding diplomas, these must be exposed and remedied by public discussion and by the influence of the Medical Council. There is, however, one other point which we think has not been sufficiently insisted on, and that is, that if the various bodies are to obtain equal privileges, they must be equally active and equally jealous in maintaining and enforcing a high ethical standard amongst their graduates and diplomates. We are not equally clear as to the propriety of giving hospital appointments to candidates without some of the recognised higher qualifications. We have said before, and we repeat, that hospital practice involves responsibilities which ordinary practice does not. The ordinary diploma may quite well guarantee sufficiency for ordinary work, yet not for hospital work. But this is a separate question, and ought to be treated separately from that of equal justice to the diplomas of England, Ireland, and Scotland. That 1500 men from the Irish schools are to be found practising in England may be held as a substantial proof that there are no narrow jealousies between either the peoples or the profession in the different divisions of the kingdom.

SMUGGLING SMALL-POX INTO PLYMOUTH.

THE town of Plymouth has naturally been somewhat exercised at learning that a man who recently arrived by vessel suffering from small-pox was wandering about the borough from Wednesday until the following Sunday morning, when he was removed to the hospital ship *Pique*, all this taking place in a town which has not only an urban sanitary authority, but also a port sanitary authority. As far as can at present be learned, the man was "smuggled" ashore by the captain of some unknown vessel, who simply entered Plymouth port in order to discharge the sick man; the patient then wandered about frequenting one or more common lodging-houses. Being found destitute by the police on Saturday night, he was next taken by them to the workhouse; and, finally, after being wrapped in some rugs by the master, he was at last got off to the hospital ship. The master was unable to receive him, for the workhouse authorities have handed over their isolation hospital to the urban authority. At a lengthened discussion to the circumstances of this event, it was found difficult to assign blame in the right quarter. But there are at least two phases of the story that need further investigation. In the first place, it should be ascertained what vessel landed the patient. The man himself refuses to disclose the name of the vessel; but vessels can hardly enter Plymouth and depart again without someone being aware of it; and if the local staff refuse to give the needed information, the Board of Trade should be appealed to. The action of the captain implies that he knew the patient was suffering from an infectious disease; and if

the Plymouth port sanitary authority has, like the town authority, adopted the provisions of the Infectious Diseases (Notification) Act, 1889, the owner or the captain of the vessel might probably be proceeded against, unless indeed the vessel was one belonging to a foreign Government, and would therefore come within the exemption of the last paragraph of Section 13 of the Act. Then it is stated that the man stayed at various common lodging-houses. Here a good deal depends on the phase which the disease had reached at this time, but under the Public Health Act every keeper of a common lodging-house is required to give immediate notice to the medical officer of health and to the relieving officer when any person in his house is suffering from infectious fever. The case will be further investigated before action is taken. But it is to be hoped that it will not again be possible for a person obviously sick of an infectious fever to be wandering about the streets of a district which has practically double means for protecting its inhabitants, in so far as it has two sanitary authorities, one dealing with its port and the other with the borough proper.

THE LIGATURE OF ARTERIES IN EPILEPSY.

IT may be recalled that Dr. Alexander of Liverpool advocated and practised ligature of the vertebral artery in epilepsy, but abandoned the procedure owing to its unsatisfactory results. Now we learn that a Russian military surgeon, Baron von Krüdener, has reopened the question in an experimental inquiry on the effects of ligature of the vertebral and carotid arteries. Dogs were selected on account of the resemblance of the arrangement of the arteries supplying the brain to that existing in the human subject. It was found that when both vertebrals and both carotids were tied the animal died the next day. The two vertebrals and one carotid might, however, be tied without endangering life. The plan adopted was to trephine over the motor area, opening the dura mater and examining the irritability of the motor centres by means of an induction coil. For this purpose the weakest current that would cause the forepaw to move was noted, and after a short time an epileptiform convulsion was induced, its duration as well as the strength of the current causing it being noted. The ligature of the vessels was then proceeded with, anæsthesia, which in ligation of the vertebral artery was absolutely necessary, being induced by means of morphia. The locality selected for tying the vertebral was the space between the subclavian and the scalenus anticus. There was considerable danger of opening the pleura, and when this accident occurred, which it was nearly sure to do if the animal took a deep breath, purulent pleuritic inflammation followed with fatal results. No contraction of the pupil or ptosis was ever observed to follow the ligature of the vertebrals, and when the operation was finished the animal was able to walk, though generally appearing weak in the hindquarters. This, however, was apparently due partly to the morphia and partly to the fixture in a constrained position, the operation requiring about an hour to perform. The irritability of the brain was, of course, again examined through the aperture in the skull. When both carotids were tied, the brain became pale and fell away from the cranial walls, the skin of the head became cold to the touch, and the pupils contracted, but the dog could walk, and never showed any particular signs of dulness. In those animals in which both carotids had been tied parenchymatous keratitis usually supervened, though sometimes it did not come on for some time. In one case, however, where one of the vertebrals was tied as well as both carotids, the cornea was found to be affected the next day. In another case, where both vertebrals and both carotids were tied, the animal was scarcely able to walk, the hind legs being especially affected; on examining the fundus of the eyes with the ophthalmoscope, the arteries could be seen to be contracted and the veins dilated, and the greenish-yellow reflexion of the tapetum was almost entirely replaced by a dark colouration. In no case was any convulsion observed as a consequence of ligature. After a time the animals operated on were killed, their vessels injected, and a careful post-mortem was made. In all cases it was found that after a short time subsequently to the operation the circulation must have gone on with perfect facility, even the vessels that were tied only being narrowed for a very short distance; others anastomosing with them being dilated so as to carry an additional supply of blood. It was evident that only a very temporary change in the condition of the brain as to its irritability could be obtained by ligature of even three out of the four vessels supplying it, and Baron von Krüdener believes that the temporary improvement which has been sometimes observed in persons subject to epilepsy after ligature of the vertebral arteries is due not to the ligature at all, but to the loss of blood from the general vascular system and to the psychical effect of the operation. In support of this view he quotes several cases, including those of Tissot and Maclaren, in which various operations have appeared to stop epileptic fits, also Féré's successful treatment of ten cases by the repeated application of the actual cautery. His view is that it is hopeless to expect to cure epilepsy by any operation directed to the brain or any other localised portion of the nervous system.

THE PORT OF LIVERPOOL.

IN some respects the maintenance of vigilance in matters relating to health is even of more importance in Liverpool than in any of our port sanitary districts, and we are glad to note from time to time how well the sanitary conditions affecting that port are supervised. In 1889 no less than 197,855 emigrants passed through the port, their temporary stay in Liverpool taking place at lodging-houses engaged by the shipping companies, and as to which Dr. Stopford Taylor says that they are conducted in a manner which is highly creditable. Of 23,475 vessels entering the port, 4016 were inspected. Of these, 264 were found to be defective, but it is satisfactory to find that in securing a remedy it was in no single instance necessary to resort to legal proceedings. Infectious diseases are carefully looked after, both in direct connexion with the shipping and incidentally through the flow of emigrants. Amongst the other work carried on in the port reference is made to the examination of meat and to the destruction of a portion of a cargo of mutton from Buenos Ayres. As to the general sanitary state and cleanliness of vessels, British and American ships are well spoken of.

DISLOCATION OF THE PENIS BENEATH THE SKIN OF THE SCROTUM.

DR. SERGEI MALINOVSKI records in the *Khirurgicheski Vestnik* a case of very unusual form of injury to the penis, which occurred while he was acting as *ordinator* or *chef de clinique* in Professor Levshin's wards in Kazan. A man who had been employed in minding a horse that was working a mill got entangled in the machinery, the trousers being drawn between a horizontal and a vertical cogged wheel and the penis was injured. There were two great wounds, one an extensive rupture of the prepuce close to the corona, the other a rupture of the integument of the scroto-penile fold on the left side, the body of the penis itself slipping under the skin of the scrotum. He was

attended in a rural lazaret by a *feldsher* (hospital sergeant), who did not reduce the dislocation or suture the wounds, but contented himself with applying antiseptic dressings. In about three weeks the man had quite recovered. From the first there was no swelling of the scrotum and no difficulty in micturition, the only thing he complained of being the impossibility of coition. When he was admitted under Professor Levshin four months after the accident the glans was to be seen protruding from the wound in the left scroto-penile fold, the lips of which had closed round the sulcus, the rest of the penis being felt as a freely movable body beneath the skin of the scrotum and the skin of the penis, hanging down in front of the scrotum like an apron attached to the cicatrix by its inferior border. This skin, or so-called cutaneous tube (Nélaton) of the penis, the lumen of which was obliterated, was first made permeable and dilated by means of tents, and repeated attempts made to return the body of the organ into it. Ultimately, however, these were abandoned, and recourse had to a plastic operation, the body of the penis being released by slitting up the scrotum, and a new covering being formed for it partly out of scrotal integument and partly out of its proper skin. The result was entirely satisfactory, the power of coition returning. There was, however, some shortening of the organ. Dr. Malinovski has only been able to find four previous cases of dislocation of the penis recorded in medical literature, at least since the year 1850, when Nélaton published a case occurring in a boy of six.

FEEDING OUT-PATIENTS.

AN evening contemporary speaks approvingly of a plan in connexion with University College Hospital for providing semi-convalescents, at a cost of 2*d.*, with a good meal of meat, bread, vegetables, and a glass of porter. It is stated to be served daily at 12 o'clock at 2, Woburn-buildings, Euston-road. The danger in all such arrangements is that of pauperising patients and adding to the out-patient work of hospitals, which is already so enormously overgrown as to constitute one of the great abuses that prejudice many charitable people against the hospital system. In the abstract, there can be no question about the kindness of facilitating the building up of a "*poor*" convalescent. As to the particular beverage chosen to wash down the dinner, we are disposed to say, Why porter? The sanction of the hospital to porter as a part of dinner should not be wholesale, or the convalescents who use this restaurant will be multiplied, and the medical result will not be equivalent.

BREATHING SPACES FOR MANCHESTER.

UNDER the presidency of Mr. Alderman Schofield, who may be fairly styled the veteran sanitary reformer of Manchester, a public conference was recently convened by the Manchester and Salford Sanitary Association to consider the question of the condition of so-called "cottage dwellings" in the city. The district of Hulme came under especial consideration, and it was urgently pressed by the chairman, by Dr. Ransome, and by others, that the abandonment of the Hulme cavalry barracks ought not to be followed by the erection of dwellings on the site, but that the area ought to be retained as an open recreation ground, in the interests of the vast number of people living in the comparatively small and closely packed dwellings so abundant in that district. Miserable courts, *culs-de-sac*, and unhealthy dwellings are stated to be numerous there, and it is to be hoped that Alderman Schofield's wise counsel, to the effect that even if the purchase of the barrack site as a breathing ground cost 2*d.* in the £, or 2*s.* 6*d.* a year, that would be a small expenditure compared with the advantages which would be secured. In the end it was decided to form a Healthy Homes Society for Hulme, and to approach the Mayor and Corporation on the question of open areas. The interest which the working classes of some of our large towns are taking in this question is a promising sign of the times; and the well-guided action of the Manchester and Salford Sanitary Association will, we feel sure, tend to strengthen the hands of Dr. Tatham in the heavy work which lies before him in the densely crowded city to which his services as health officer have been recently transferred.

DURHAM UNIVERSITY AND THEIR PROPERTY.

ACCORDING to a report of the proceedings of the Durham Rural Sanitary Authority, that body has failed to obtain a remedy for the condition of a farm belonging to the University, and this although notice has been given to the University authorities as to the circumstances, which are alleged to be "disgraceful." Assuming the statements as to the University farm to be correctly described, it is but natural that the sanitary authority should find amusement in the reminder that the University professors are active movers in sanitary matters when these affect the city in which they live and teach. The University is also one of the bodies which give special teaching and a special diploma in Sanitary Science, and it is sincerely to be hoped that its officers will not neglect in their own property the teaching which emanates from their professorial chairs. The latest proposal before the rural authority was "that the University be summoned."

EFFECTS OF A VERY LARGE DOSE OF ACETANILIDE.

A NUMBER of cases have been recorded showing that even moderate doses of antifebrin or acetanilide may be followed by toxic symptoms, but no case has until now been reported in which nearly an ounce of this drug had been taken. It has generally been supposed that the toxic properties of acetanilide are due to the aniline of which it is manufactured, and it was therefore to be expected that the symptoms occurring in the two cases would be very similar. Dr. Hartge of Dorpat, who has recently had ample opportunities of observing a case in which a student who had caught cold had dosed himself with twenty-eight or twenty-nine grammes of acetanilide in addition to a considerable quantity of spirit, states that the symptoms only very partially corresponded with those mentioned by Dr. Dehio as due to poisoning by 154 grains of aniline, and which consisted in blue colouration of the skin and mucous membranes, profound coma lasting for several days, irregularity and quickening of the respiration, acceleration of the pulse, the smell of aniline in the breath, loss of power of motion, considerable disturbance of the sensory powers, followed by jaundice, with anæmia, albuminuria, and hæmoglobinuria. It is probable that this aniline was by no means chemically pure, but contained several other substances, especially toluidine, which is nearly always met with in the aniline used for commercial purposes, and in that employed by bacteriologists for staining tubercle bacilli. In Dr. Hartge's case, notwithstanding the enormous dose of acetanilide which had been taken, a quantity which requires five-sixths of an ounce of aniline to make it, or more than twice as much as Dr. Dehio's patient took, there was no loss of consciousness, of motion, or of sensation; no albuminuria or hæmoglobinuria, and only the slightest trace of jaundice; the blood-corpuscles, too, presented their normal appearance and character, there being no detritus or specks of pigment, though the colour of the blood was changed to a dark-blue, as in aniline poisoning; also the

respiration was rendered rapid and irregular and the pulse accelerated. The patient complained greatly of inability to sleep, and the cardiac palpitation and dyspnœa produced a feeling as of impending death. No medical aid was sought for many hours after the drug had been taken. When Dr. Hartge saw the patient first, he was much struck by the marked blueness of the skin, which was general over the whole surface, but especially dark in the eyelids, the chin, and the temporal regions. There was no puffiness, as in severe cases of asthma, and the general appearance was quite different from that of cyanosis. Although there had been no vomiting, a glass of red wine was immediately brought up, and the stomach was soon afterwards thoroughly emptied, a quantity of bilious matter being evacuated. The treatment consisted in giving sulphate of soda draughts, together with coffee and brandy, also hypodermic injections of camphor in ether, and the application of cold compresses to the head. On the third day the patient was able to leave his bed, and the blue colour had entirely vanished. In conclusion, Dr. Hartge, who was fortunate enough to obtain Professor Dragendorff's co-operation in the working out of the case, remarks that there is reason to believe that the acetanilide taken by the patient must have been a remarkably pure specimen.

EAST MOLESEY SEWERAGE SCHEME.

THE Local Government Board have refused their sanction to the raising of a loan of £19,000 for the system of sewerage proposed by the East Molesey Local Board of Health. The refusal is based largely on the circumstance that the local board did not allow their engineer to select a site for the works, and that the purchase of the site chosen by the authority has met with strenuous opposition on the part of various boards of health, owners of property, ratepayers of West Molesey, and of the Lambeth Waterworks Company. The central authority are also unable to satisfy themselves that the contention of the water company to the effect that their water-supply would suffer by reason of the contamination of the subsoil from which part of their water is pumped is not a substantial objection; and they point out, on the other hand, that at least one other site is available which would be free from the principal objections urged against the existing scheme, and that the alternative site is so situated that it would also be available for the purposes of West Molesey in case that authority should choose to join in the scheme. Under all the circumstances, they request the East Molesey sanitary authority to reconsider the question of site for the disposal of their sewage.

POSTCARD POPULARITY.

TO ascertain popular opinion by postcard competition is not a particularly novel idea, but its application to questions connected with the medical profession has hitherto been of a somewhat indirect and unobjectionable character. In matters relating to art and literature some sort of solution of difficulties has frequently been attempted; the best pictures in the Academy, the most popular painters in special grooves, the most favourite authors, and the books most read, have, after a fashion, been determined by popular vote, and when once the ball was set rolling there was no difficulty in extending the range of debatable questions until this form of collective investigation degenerated into the guessing of riddles, in which public interest was no longer concerned. Postcard competitions, however, still appear to find favour in certain quarters and afford an outlet for ingenuity mingled with a mild sporting element. There is, as a rule, no particular fault to find with these competitions; indeed, it is possible to be leniently sarcastic at the tact with which the subjects are occasionally selected—as, for example, when prizes are offered for notions upon the best half-page advertisement or some similar topic which may be expected to bear fruit eventually. But we think the amusement is being carried a little too far, and into undesirable channels, when the "six most popular prescribers" form its object, and chemists and their *employés* are thus asked to furnish a gratuitous advertisement for those who least need it. The contemporary responsible for this publishes the six successful names, and, in addition, gives some thirty or forty others who followed with "gradually diminishing suffrages." Regret is expressed that the cards received were not so numerous as they should have been. This is perhaps the best evidence that the want of good taste was generally appreciated. Doubtless the list will find its way into non-medical journals. To reproduce it here would only give pain. The addresses of the successful competitors afford an indication of the principles which have guided them in their selection of those in possession of baronetcies and knighthoods.

THE PREVENTION OF OVERLAYING.

WE have it on the authority of Dr. Danford Thomas that as many as 200 infants are suffocated annually in the Central Division of Middlesex alone, and that the great majority of these are overlaid by their parents. So high a death-rate from one cause is in itself significant. It is the more noteworthy if we allow, as we must, that the operation of this cause is avoidable, and therefore culpable, though in a varying degree. It is easy, of course, to say that offences of this nature should be legally punishable, and we have already stated our opinion that the mere fact of overlaying implies the liability of the parent, and should be held to justify the infliction of a penalty. In the face of such facts as that recorded by Dr. Thomas, indeed, it might even be advisable to forbid any parent or nurse to sleep in the same bed with an infant. Whatever the final form of the restriction imposed we must remember that prevention is always the best remedy. With this object before us, we cannot but advise every such nurse or parent, for herself and by her influence on others, to teach and to recognise in practice the urgent necessity of allowing to infants, however young, the comfort and security of a separate sleeping crib. A little forethought in such matters as this would go far to save us from the somewhat humbling spectacle of a statute book swollen with accumulated petty acts of domestic legislation for which the rule of common sense ought to have sufficed.

OPEN SPACES.

THERE is no more commendable form of liberality in wealthy men than that which leads them to give "lungs" to town communities. In London the want of such spaces constitutes one of the most urgent of public questions. We see with much pleasure that Mr. George Palmer of Reading has announced the gift of a park of forty-nine acres at the east end of the town for the benefit of the inhabitants. Considering the tendency to the concentration of the population in towns, and the thousands that are growing up who never see trees, or rivers, or the sea, we look on those who enlarge their natural enjoyments by affording them opportunities of appreciating the sense of space and of indulging in fresh pure air as among prime benefactors of their fellow-creatures.

UP to the present time influenza in Calcutta had entirely confined itself to the native quarter, but now it has extended to the workers at most of the offices in that city. The engineering establishment on the opposite bank of the Hoogly has been closed for three weeks, and seventy of the students have been attacked. The outbreak, however, is of a mild form, and rarely lasts more than three days.

ON Saturday, March 29th, at the Westminster Hospital, Mr. Richard Davy tied with kangaroo tendon the innominate and common carotid arteries for a steadily advancing aneurysm of the third part of the subclavian and axillary arteries. Pulsation in the sac was completely arrested for four hours, but reappeared gradually in a subdued form. The right radial pulse, which was imperceptible prior to the operation, became pronounced. The man, aged fifty-seven, was relieved of the intensity of his pain. The wound healed almost by the first intention, and all went well up to the fifth day; then the patient was distressed with symptoms of bronchitis and dyspnœa, and he died on Wednesday, April 9th, the eleventh day after the operation.

ON Saturday last Mr. Pearce Gould operated at the Middlesex Hospital for an unreduced dislocation of the shoulder, by the method recently described by Sir Joseph Lister. The dislocation was of eight weeks' standing, and was attended by great pain and paralysis of the hand and arm, as well as œdema. We learn that these symptoms have entirely disappeared, and that the patient is progressing favourably.

Pharmacology and Therapeutics.

SODEN MINERAL PASTILLES.

THESE lozenges are agreeable in appearance, and possess a pleasant, slightly saline taste. They are stated to be prepared from the salts obtained from the Soden mineral springs, and to be of service in many catarrhal conditions, for which their soothing qualities appear to be well adapted.

ELIXIR CHLORALAMIDE (WYLEYS).

This elixir is of a pale-straw colour, with a somewhat burning taste when undiluted. It is compounded to contain fifteen grains in each fluid drachm, and can therefore be employed in doses of one and a half to three fluid drachms in water. It mixes readily, and furnishes a sufficiently palatable preparation possessing the now recognised hypnotic properties of chloralamide.

MURRAY'S PATENT FLUID MAGNESIA.

Sir James Murray's preparation of fluid magnesia has long been before the profession, and has already received numerous testimonies to its efficacy. The absence of any tendency to form concretions constitutes one of its main advantages. The solution is now supplied by Messrs. Barclay and Sons, and it possesses all the qualities originally claimed for it. With a little lemon-syrup it forms an agreeable effervescing aperient draught, which is readily taken by children.

AGARICINIC ACID.

Agaricin has for some time been employed in the night sweats of phthisis. It is now stated that Professor Kahler of Prague, and some other observers, have found a new preparation of this substance—agaricinic acid—very efficacious for the same purpose. A dose of from one-third to three quarters of a grain was well borne and produced no unpleasant effects, except that the largest of these quantities sometimes caused a slight and transient nausea. As a rule, a pill containing one-seventh of a grain is sufficient. It should be given about six o'clock in the evening.

NORFOLK AND NORWICH HOSPITAL.—The annual statement presented at the annual general meeting of the Board of this hospital deplores the fact that the income for the past year has not met the necessary ordinary expenditure. The accounts show that the sum of £297 10*s.* 11*d.* remains due to the treasurer. The amount received as legacies is £846 below the amount in 1888. Subscriptions and donations also show a further reduction. It is pointed out that the services of nurses engaged in private nursing realised £324 8*s.*, or £43 more than in 1888, and that the Board of Management have under their consideration the question of the still further development of this branch of the hospital work.

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

IN view of the biennial festival dinner in aid of the funds for the pensioners and foundation scholars of this institution, to be held at the Hôtel Métropole on Thursday next, the 17th inst., under the presidency of Sir James Paget, Bart., F.R.S., a brief sketch of the history of the institution, setting forth its advantages to the medical profession as well as the excellent results which have accrued from its work, will doubtless prove of interest.

It is almost fifty years since John Propert, the Welsh founder, conceived the idea of establishing a benevolent society, which would not only afford assistance to aged and disabled medical practitioners, but would also confer great advantages upon the children of medical men who, from premature death or misfortune, had been unable to make provision for their families. The writer of this article well remembers the consultations with the late Mr. Wakley which Mr. Propert, adorned with his celebrated "buttonhole," used to hold at THE LANCET Office on the subject which for him seemed to have an almost absorbing interest. The result of his munificence, energy, and ability was the establishment of the Epsom College, under the patronage of Queen Victoria, which, besides providing an asylum and pensions for incapacitated medical men or their widows in reduced circumstances, also provides a gratuitous education for orphans, and an establishment for the sons of duly qualified practitioners, where, at a lower rate of fees than obtain in other public schools of the same class and of equal merit, an education of a high character can be imparted. While doing this, the sons of those who are not medical men are also admitted to share the educational advantages of the school at a rate about equivalent to what is paid elsewhere. The names of men eminent in various walks of life are to be found among the vice-presidents and members of the council, who, recognising the serious evils attaching to class schools, offer annually entrance scholarships, open to all comers, and varying in value from £20 to £40 per annum. The good work of this benevolent institution will be appreciated when it is remembered that it provides fifty foundation scholarships, entitling the holders, who must be the sons of incapacitated medical men, to education and maintenance, on exactly the same footing as other boys, absolutely without expense; that seven foundation scholarships for female orphans of medical men have been established through the munificence of Mr. France in connexion with the College at the School of St. Anne's Society; and that fifty pensioners are receiving annuities of £21 per annum out of the funds of this Society, some of them having, in addition, rooms at the College, and being supplied with fuel. The participants of the pension fund must have been legally qualified medical men registered for five years, or the widows of such medical men who are not less than sixty years of age. Foundation scholars are elected from among the necessitous orphans of such medical men as would be professionally qualified for pensionerships, and are chosen by ballot by the governors, who may vote either personally or by proxy, the votes being distributed in the proportion of one for each guinea annually subscribed, for every donation of ten guineas, or for every twenty guineas collected. The school contains 200 resident pupils, fifty of whom are foundationers; as to the remainder, the sons of medical men below the age of fourteen are charged £49 10*s.* per annum, the charge for those above that age amounting to £52 10*s.* per annum. Those boys, on the other hand, who are not the sons of medical men are required to pay £70 per annum. The advantages of a College of this kind are too obvious to be dwelt upon. In addition to the benefits to be derived from a collegiate course, a condition of sanitary arrangements exists at Epsom which few public schools in the country can boast of. The teaching staff of the College is a most efficient one, and is composed of men well known in their profession as eminent scholars and educationists.

The instruction is arranged on the most approved modern principles, and combines the branches of education which deal with modern culture, and those fitted for preparation for merchantile pursuits. No better training for enter-

ing the professions of law, medicine, or theology can be obtained than is given at this College, while the instruction directly leads up to the examinations conducted under the auspices of the London University, the Cambridge University, and the Civil Services. To boys preparing to enter the medical profession no school in England offers equal advantages from an educational and a pecuniary point of view. Through the generosity of the managers of the various London hospitals seven scholarships are awarded to pupils on completing their course at the institution, ranging in value from £90 to £120 a year. We may also mention the Haviland Scholarship of £60, tenable for four years, awarded to the boy who passes the best examination in science; the Wakley Prize of £20, awarded biennially, which was created by the sons of the late Thomas Wakley, who, after considering the various medical charities, selected the Epsom College as the recipient of the money which had been subscribed by the profession as a memorial to their father, in order to found a perpetual prize in his memory); and the Hodgkin prize of £15, awarded by ballot to a boy who, after being in the school not less than three years, is about to leave or has recently left. The Owen Scholarship of £50 for the orphans of medical men; and the Forest Exhibition of £50, tenable for three years, are others which may be noted. The Propert prize of £20 in honour of John Propert, the founder of the College, is awarded to the boy who, being in the school or having recently left, has gained the highest honour during the year in open competition. Indeed scarcely any public school of corresponding dimensions is better endowed in the way of scholarships.

Examination *per se* cannot be held to be wholly trustworthy as a criterion of the efficiency of an educational establishment. Still it is an available means of judging in some measure of the nature of the instruction imparted, and in this connexion we may point out that in 1888 four of the pupils leaving school passed the Preliminary Scientific Examination for the degree of M.B. of the London University, and ten succeeded in passing the London Matriculation Examination in the First Division. Last year the successes were equally satisfactory. Judged therefore by the present examination standards, this College has produced results which entitle it to rank second to none of the public schools of the present day. In further proof of this statement, and as evidence of the successful careers of many of the former pupils, we append the following list of Open Entrance Scholarships at the Universities gained by Epsomians:—

1864. C. J. Yate.....	Trinity Hall, Cambridge.
1866. C. C. Elcum (Classics).....	Sidney Sussex College, Camb.
1868. C. G. Newton (Mathematics) ..	St. Catherine's College, Camb.
1871. A. Sloman (Classics).....	Pembroke College, Oxford.
1872. H. C. Wright (Classics)	Pembroke College, Oxford.
1874. W. J. Noble (Nat. Science)	Keble College, Oxford.
1875. F. Baylis (Nat. Science).....	Christ Church, Oxford.
1875. A. Cutfield (Nat. Science)	Christ's College, Cambridge.
1877. L. H. Armstrong (Nat. Science)..	Clare College, Cambridge.
1877. G. B. Hoffmeister[1] (Nat. Sci.) ..	Caius College, Cambridge.
1877. H. B. Shaw (Nat. Science).....	Sidney Sussex College, Camb.
1878. J. H. Hichens (Nat. Science) ..	Queen's College, Oxford.
1878. C. E. Robbs (Nat. Science)	Caius College, Cambridge.
1878. J. Jervis (Classics)	Queen's College, Cambridge.
1880. T. H. Walker (Nat. Science)	Christ Church, Oxford.
1880. H. J. Mackinder (Nat. Science)	Christ Church, Oxford.
1881. C. K. Bowes (Nat. Science)	Christ Church, Oxford.
1882. D. J. Carnegie (Nat. Science)..	Caius College, Cambridge.
1882. H. R. C. Barber (Mathematics)..	St. Catherine's College, Camb.
1883. H. B. Leete (Classics)	Worcester College, Oxford.
1887. J. P. Long (Classics).....	Worcester College, Oxford.

In the years 1884 and 1885 the Burdett-Coutts Scholarship, which is open to the whole University of Oxford, was gained by H. J. Mackinder and J. H. Hichens.

Rev. Arthur Sloman, head master of Birkenhead school, and the Rev. A. C. Fox, head master of Reigate school, are old pupils of this College.

Dr. Frederick Taylor and Dr. J. F. Goodhart, of Guy's Hospital, Dr. R. Boxall and Mr. Henry Morris, of Middlesex Hospital, and Mr. Bilton Pollard, of University College Hospital, are old Epsomians.

The annuities of fifty pensioners, and the education, board, lodging, and clothing of fifty foundationers absorb at least a sum of £4000 per annum, without reckoning the expenses of management and of collection. To meet this the only certain income is the endowed fund, which brings in about £450 a year. In 1885 the College was some thousands of pounds in debt, and it says much for the hard work and financial management that that incubus has now been cleared off.

The Editors of THE LANCET will be pleased to receive the contributions of any who may be unable to attend the dinner, and any such subscriptions will be duly acknowledged in our columns and forwarded to the treasurer.

[1] Surgeon to the Queen in the Isle of Wight.

TENTH INTERNATIONAL MEDICAL CONGRESS, BERLIN, 1890.

IN accordance with the resolution of the Ninth Congress, held at Washington, the Tenth International Medical Congress will be held this year at Berlin, opening on August 4th. In connexion with this Congress there will be an International Medico-Scientific Exhibition, and those interested in the movement are cordially invited to forward exhibits bearing on subjects in connexion with medicine, surgery, and the cognate sciences to Dr. O. Lassar, 19, Karlstrasse, Berlin, N.W., who will furnish information with regard to space, charges, and matters connected with placing the exhibits.

The various sectional committees have now issued invitations to take part in the proceedings of the sections, and express a hope that they may have the satisfaction of welcoming large numbers of their colleagues to Berlin. We have already given in our issue of March 22nd a synopsis of three sections of the Congress, but now append for convenience the agenda of the various sections in full, as far as at present arranged, and also the names of the respective secretaries, to whom all communications or inquiries regarding the business of the particular section should be addressed. Inquiries of a general character should be directed to Dr. O. Lassar, Secretary-General of the Congress. The official languages of all the meetings will be German, English, and French. It will, however, be allowable to make use of other languages than the above for brief remarks, always provided that one of the members present is prepared to translate the gist of such remarks into one of the official languages. Those who take part in the Congress must pay a subscription of twenty marks (one pound sterling, or five dollars) on being enrolled as members. For this sum they will receive a copy of the Transactions as soon as they appear. The enrolment will take place at the beginning of the Congress. Gentlemen may, however, be enrolled as members by sending the amount of the subscription to the treasurer, Dr. M. Bartels, Berlin, S.W., Leipzigerstr. 75, with their name, professional status, and residence appended.

The following is the preliminary programme of the various sections:—

I.—ANATOMY: 1. The Convolutions of the Brain. 2. The Present State of the Doctrine of Nucleus Segmentation and Cell Division, with special reference to the Directing Bodies, the Spheres of Attraction, and the Accessory Nuclei. 3. Histogeny and Connexion of the Nerve Elements. Sectional Secretary: Professor Hertwig, 34, Maassenstrasse, Berlin, W.

IV.—PHARMACOLOGY. Sectional Secretary: Dr. Oscar Liebreich, 34a, Dorotheenstrasse, Berlin, N.W.

VI.—DISEASES OF CHILDREN: 1. Intubation of Larynx. J. O'Dwyer, New York. Sectional Secretary: Professor Henoch, 8, Bellevuestrasse, Berlin, W.

VIII.—OBSTETRICS AND GYNÆCOLOGY: 1. Antiseptics in Midwifery, introduced by Dr. Galabin, London. Professors Stadfeldt, Slavjanski, and Fritch will take part in the discussion. 2. Artificial Premature Labour, introduced by Dr. Th. Parvin of Philadelphia. 3. Vaginal Extirpation of the Uterus, introduced by Dr. Williams of London. 4. Electrolysis of Myoma, introduced by Apostoli of Paris. Sectional Secretary: Dr. A. Martin, 2, Moltkestrasse, Berlin, N.W.

IX.—NEUROLOGY AND PSYCHIATRY: 1. Surgery of the Central Nervous System, by Professor Victor Horsley, M.D. London. 2. The Traumatic Neuroses, by Professor Schultze, M.D. Bonn. 3. The Pathological Anatomy of Dementia Paralytica, by Professor Mendels, M.D. Berlin. Sectional Secretary: Dr. H. Laehr, Zehlendorf, Berlin.

X.—OPHTHALMOLOGY: 1. Sympathetic Ophthalmia. 2. Trachoma. 3. The Influence of the Electric Light upon the Eye. Sectional Secretary: Professor Dr. Schweigger, 6, Roonstrasse, Berlin, N.W.

XI.—OTOLOGY: 1. Relations of the Micro-organisms to Affections of the Middle Ear. 2. The Cholesteatoma of the Ear. 3. After-treatment of the Processus Mastoideus when pierced with the Chisel. 4. Pathological Anatomy of the Labyrinth. 5. The Condition of the Ear in Tabes Dorsalis. 6. Hearing Capacity and its Uniform Nomenclature. Sectional Secretary: Professor Lucae, 9, Lützowplatz, Berlin, W.

XII.—LARYNGOLOGY AND RHINOLOGY: 1. Laryngology since the last International Congress in 1887, Dr. Fränkel, Berlin. 2. Diseases of the Accessory Nasal Cavities, Dr. M'Bride, Edinburgh. 3. Cancer of the Larynx, Henry T. Butlin, London. 4. Acute Infectious Inflammations, F. Massei, Naples. Sectional Secretary: Professor B. Fränkel, 12, Neustadtische Kirchstrasse, Berlin, W.

XIII.—DERMATOLOGY AND SYPHILOGRAPHY: 1. Pathology of Pigmentations and Decolourations of the Skin. 2. Chronic Gonorrhœa. 3. The Treatment of Syphilis. 4. Inflammatory Skin Diseases. 5. The Nature of Exanthemata due to Drugs. 6. Lupus Erythematosus: its Nature and Treatment. Sectional Secretary: Dr. Lassar, 19, Karlstrasse, Berlin, N.W.

XIV.—TEETH: The work in the forenoon will consist of practical demonstrations in the Dental Institute, and the afternoons to the discussion of papers. 1. Narcosis with Bromide of Ethyl. 2. Pyorrhœa Alveolaris. 3. Micro-organisms and Decay of the Teeth. 4. Crown and Bridge Work. 5. Bonwill Method of Articulation. Sectional Secretary: Professor Busch, 6, Alexander-Ufer, Berlin, N.W.

XVI.—MEDICAL GEOGRAPHY AND CLIMATOLOGY: 1. On the In-

fluence of Tropical Climate on Immigrants. 2. On the Endemic and Epidemic Diffusion of Yellow Fever. 3. Beri-beri regarded from an Etiological and Therapeutic point of view. 4. Leprosy, with special regard to its Spread by means of Hereditary Transmission and Contagion. 5. On the Geographical Extension of Malarial Diseases. Sectional Secretary: Professor A. Hirsch, 113, Potsdamerstrasse, Berlin, W.

XVII.—STATE MEDICINE: 1. The Doctrine of the Gonococcus. 2. On Virile Impotence. 3. The Lung Test for Live Birth. 4. Does Sepsis originate after Spontaneous Abortion? 5. Does Moral Insanity exist as an Independent Disease or as a Symptom of other forms of Mental Alienation? 8. The Proofs of Vitality. 9. The Auto-infection of Puerperal Women. 10. The Ptomaines in Forensic Medicine. 11. Forensic Experiences of Rigidity in Corpses. Sectional Secretary: Professor Liman, 46A, Königgrätzerstrasse, Berlin, N.W.

XVIII.—MILITARY HYGIENE: 1. The Antiseptic Treatment of Wounds resulting from the Accidents of Warfare, Generalarzt von Bergmann. 2. Movable Hospitals in Peace and War. 3. Hospital Ships in Naval Warfare. 4. The Organisation of the Prophylaxis of Epidemic in the Armies in the Field and at Home. 5. The Sick Lists and Sanitary Reports, John S. Billings, U.S. Army. 6. The Trepanning of the Skull. 7. The Mortality in the Italian Army (1881-88), Dr. J. Sormani. 8. Movable Hospital Barrack for Tropical Countries, Dr. Daubler. Sectional Secretary: Oberstabsarzt Dr. Krocker, 65, Potsdamerstrasse, Berlin, W.

THE SANITARY PHASE OF THE SIBERIAN ATROCITIES.

(FROM A CORRESPONDENT.)

THE revelations published by *The Times* concerning the massacre of unconvicted political prisoners and exiles at Yakoutsk, the flogging to death of Madame Nahida Sihida at Ust Kara, and the consequent wholesale suicide of male political prisoners of Lower Kara have awakened public attention far and wide. Indignation meetings have been held in America and in England; societies have been formed—in London the Oppressed Nationalities Aid Committee, in Newcastle the Friends of Russian Freedom. An agitation is likely to arise like that which followed on Mr. Gladstone's denunciation of the atrocities committed in the Neapolitan prisons, and which culminated in the establishment of a free and united Italy. Putting aside the political aspect of the question, it comes legitimately within the province of THE LANCET to enter a protest against such treatment of political prisoners as jeopardising health and life. The text of the Russian law, which stipulates that corporal punishment shall not be administered unless the culprit has been previously examined by a medical man, is on medical grounds to be approved. It is only when the prison doctor declares the prisoner capable of supporting such pain that the flogging is to be administered, and this in the presence of the doctor. In the case of Madame Nahida Sihida the prison surgeon, Dr. Gurvich, declared that such a punishment as flogging could not be administered, and refused to be present. The entire profession must feel grateful to Dr. Gurvich at having thus held out against the committal of such an act of brutality. Any appearance of sympathy with political prisoners exposes a medical man to be classified among the suspects, and this may lead to his arrest. No trial follows, but by "administrative order" he is sent into exile, where such hardships await him that he will probably die of "prison consumption," or some other preventable malady. Dr. Gurvich, nevertheless, declared that Madame Sihida was under treatment for heart disease; and, however this may be, it was evident that, after a "hunger strike" of twenty-two days, when life was only sustained through the forcible administration of food by enemata, this highly nervous and sensitive lady was not in a condition to be ruthlessly flogged. A hundred blows, it is said, were administered. Madame Sihida was a school-teacher, a lady of high education and attainments, suffering exile to the farthest stations of Eastern Siberia in consequence of her political convictions. She was rudely seized, and, in spite of the doctor's disapproval, stripped in the presence of soldiers, thrown on a bench, held down, and received on her bare back a hundred blows administered with vigour by the strong arm of a soldier. What wonder if such chastisements produced fatal results. Madame Sihida was killed by this flogging, and the medical profession will be proud to learn that the prison surgeon Gurvich would not associate himself with this inhuman cruelty. It is to be hoped he will not be persecuted in consequence of his abstention, and that if any misfortune does befall him the medical profession of England will, if it be in any way practical and possible, come to his rescue.

The horrors of Siberian exile have been frequently described, but it is not sufficiently known that some of the worst suffering is caused by a wilful imposition of insanitary conditions. The greater part of the disputes and disturbances that arise between the prisoners and their escorts as they travel through Siberia are caused by the *parásha*. The journey, it must be borne in mind, to the eastern stations of Siberia sometimes lasts a whole year. During this time the prisoners, male and female, too often accompanied by children, have to sleep as best they can in the wayside prison houses, which most frequently are but wooden huts. Against the walls slanting boards called *narys* are placed, and on these the prisoners lie down and sleep side by side. For all convenience the soldiers bring into the centre of the room the *parásha*; this is a large wooden bucket. There is no lid, no disinfectant. Men, women, and children have in each other's presence to use this one bucket for all purposes. The exiles, especially the political exiles—for these latter are mostly persons of education and refinement, university students, sons of the nobility or landed gentry, &c.—all protest against this *parásha*. There is generally some outer room or closet where it might be placed. If not the prisoners would prefer, in spite of the intense cold, that it should be kept outside in the open. Anything, in fact, is preferable to the presence of this horrible stench tub in the middle of the sleeping room. There seems, however, to be some old and unrevoked regulation by which the *parásha* must be placed where the exiles sleep. Even in some of the rare wayside prisons, where closets have been constructed, still the *parásha* is brought in among the sleepers.

The son of a Russian nobleman, who has recently escaped from Siberia, where he had been sent for ten years' penal servitude in consequence of his political opinions, related to me, in proof of this, his experience at the prison of Krasnojarsk. The accommodation here was a little above the average. There were some closets, and for the first week or so the prisoners were allowed to make use of them. After a while, however, the attendants or gaolers brought in the objectionable *parásha*. The prisoners naturally objected, and themselves put it out. Thereupon armed soldiers came and brought the *parásha* back again. The odour was so abominable that in a short time the prisoners began to vomit. Nevertheless, the horrible bucket remained. The prisoners, indignant at being thus tortured when the existence of closets rendered such filthy practices altogether unnecessary, organised a "hunger strike." For six whole days they refused to take any food. The governor of the prison, to punish this resistance, ordered the prisoners to have half their heads shaved. Still they continued to refuse to take food. At last the governor of the prison, deeming that it was hardly worth while incurring the responsibility of a loss of life over such a dispute, gave orders to have the *parásha* removed, and allowed the prisoners to use the closets again.

Sometimes it happens, when a prison has not been inhabited for a little while, that the *parásha*, left out in the sun, has shrunk. It is, therefore, no longer water-tight. The prison authorities are not troubled by such trifles. The leaky *parásha* is placed in the room where the prisoners are crowded together. The urine in time saturates the wood and renders the bucket water-tight, but in the interval urine and dilute fæcal matter have flown out all over the prison floor. On this same floor men and women have to sleep, for it often happens that there are more prisoners than the prison can hold, and those who cannot find room on the plank beds must sleep on the bare floor, however wet and filthy it may be. Naturally, the mortality is excessive. So far as the *parásha* is concerned, the remedy is not difficult. It would impose on the soldiers of the escort a little more work. One of the sentinels on watch would have to accompany the prisoner who wished to go outside. By placing the *parásha* inside the sleeping-room the sentinels have less trouble in watching that the prisoners do not escape. Also, some sort of disinfectant could be employed. If the cost of sending disinfectants so far is too great, dry earth could be used in the summer months; and in the winter, when the ground was too hard to be dug up, there cannot be wanting a sufficient supply of cinders or ashes. Where there is a will there is a way; but evidently the desire to treat the prisoners, especially the political prisoners, in a humane manner is not conspicuous. The time has come when the voice of civilisation should make itself heard, and enter an energetic protest against practices that by their fatal results and barbaric nature are an insult to our common humanity.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Lincoln Rural District.—Dr. Harrison, in dealing with the deaths that occurred from preventable diseases during 1889, refers to certain fatal attacks of enteric fever amongst persons who had used a water-supply that had previously been condemned as unfit for domestic purposes. The wording of this reference implies that a polluted well was left open to be used for other than so-called domestic purposes, an arrangement that has again and again led to results similar to those here recorded. A new supply is being sought, by boring, for the village of Langworth, but although 295 feet have been penetrated water has not yet been reached. There is, however, abundant evidence as to the need of a proper supply as a substitute for existing polluted supplies. The death-rate for the year was 18·4 per 1000, but by excluding the mortality in the county asylum it becomes reduced to 15 per 1000.

Holsworthy Rural District.—The death-rate in this district during 1889 was 15 per 1000. After dealing at length with the vital statistics affecting the district, Mr. Linnington Ash gives an account of the infectious diseases which have prevailed, and he complains again how the management of these diseases is hindered by the absence of any provision for isolating the sick. Whilst no special action has been taken during the year as to water-supplies, it is reported that gradually considerable change for the better has taken place, but it is to be feared that periods of drought would seriously test the existing supplies. At Church Bridges, pollution of the stream is continued, a matter that may at any time place the authority in a difficult position. One point of especial interest attaching to this report lies in the circumstance that, since Mr. Linnington Ash has resigned his office, this is his last official communication. We have from time to time adverted to the localities as to which Mr. Ash has been advising for sixteen years, and it is abundantly evident that, although all which he has urged upon the authority has not yet been secured, the advice which he has given has always been based on sound and scientific principles, and that its influence for good is certain to be felt in the district for a long time to come.

Reading Urban District.—An exceptionally low death-rate of 13·6 per 1000 prevailed last year in Reading, and the sanitary progress made, though embodying no striking event, is stated by Dr. Alfred Ashby to have been continuous and satisfactory. In dealing with the zymotic cases, we note that the six deaths from diphtheria, which are below the average, are associated with nine from non-spasmodic croup, a disease which it is difficult to differentiate from genuine diphtheria. Careful inquiries are stated to have been made as to the diphtheria attacks, but there is no comment as to the allied disease. Scarlet fever was heard of in only twenty-seven instances, and it seems only to have been found necessary to secure hospital isolation in one case. The sewerage of the newly added portions of the borough is making rapid progress; but the question of improving the public water-supply has, notwithstanding the attention paid to it, not advanced. Reviewing the current work of the year, Dr. Ashby expresses the opinion that a steady improvement in public health is going on, and that the large outlay of money towards that end is now resulting in diminution of death and of sickness with a corresponding increase of capacity for work.

Sutton Coldfield Urban District.—The population of this borough is now estimated at 9100, and on this basis the death-rate is calculated as 11·3 per 1000. Last year it was 10·7, and during the past ten years it has hardly exceeded 15 per 1000. The zymotic rate for 1889 was also low—namely, 0·8 per 1000. Dr. Bostock Hill regrets that the percentage of deaths under one year of age to the registered births has risen from 7·6 to 9·5; but even with this increase, Sutton Coldfield still retains a place among the urban districts having a comparatively small infant mortality. There was no death during the past year from small pox, scarlet fever, measles, enteric fever, or diphtheria; and the only occurrence which had a serious aspect was an outbreak of scarlet fever in a ladies' school, the proprietress of which so fully and intelligently complied with and forwarded the instructions of the medical officer of health in such matters as isolation, temporary removal of scholars, &c., that the disease was promptly checked. No suspicion attached to the school premises in so far as the cause of the disease was concerned. Dr. Hill claims that a low mortality in his district is no mere accident. It has followed on the maintenance for years of progressive sanitary work as regards sewerage, drainage, water-supply, and other matters; and means have been provided for the check, by early isolation, of such infectious fevers as may arise or be imported. The record of the past year's work shows that the efforts to remove causes of disease and unwholesomeness are still efficiently maintained.

Torquay Urban District.—Mr. Karkeek speaks in strong terms of the value of compulsory notification in the prevention of disease, and explains that in several instances not more than two hours have elapsed between the receipt of the notification and the removal of the patient to the isolation hospital. Where diseases such as enteric fever have occurred, the information has also secured a remedy for conditions that were dangerous to health. One such instance referred to relates to the closing of a local well, the water of which was celebrated for its coolness, brightness, and freshness; until, at last, when enteric fever occurred, it was found that the filth which had got into it was in excess of the power of the chemical action which had heretofore brought about the desired brightness and freshness. It is to be hoped that in his next report Mr. Karkeek will tell us that no more wells sunk in the surface soil of Torquay remain to endanger the lives either of visitors or of the hospitable inhabitants of that pleasant town. The death-rate for 1889, when corrected for deaths amongst occasional visitors, was 12·4 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5345 births and 3601 deaths were registered during the week ending April 5th. The annual rate of mortality in these towns, which had declined from 26·6 to 21·4 per 1000 in the preceding four weeks, further fell last week to 19·3; the rate was 16·7 in London and 21·5 in the twenty-seven provincial towns. During the thirteen weeks of last quarter the death-rate in the twenty-eight towns averaged 24·7 per 1000, and exceeded by 1·7 the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 10·5 in Huddersfield, 12·9 in Birkenhead, 14·1 in Nottingham, and 15·5 in Leicester. The rates in the other towns ranged upwards to 25·0 in Wolverhampton, 27·1 in Plymouth, 27·8 in Newcastle-upon-Tyne, and 28·6 in Manchester. The deaths referred to the principal zymotic diseases, which had been 363 and 424 in the preceding two weeks, declined again last week to 351; they included 145 from whooping-cough, 80 from measles, 37 from diphtheria, 36 from diarrhœa, 34 from scarlet fever, 19 from "fever" (principally enteric), and not one from small-pox. The lowest death-rates from these diseases were recorded in Preston, Norwich, and Birkenhead; while they caused the highest rates in Salford, Liverpool, Plymouth, and Derby. The greatest mortality from measles occurred in Liverpool, Plymouth, and Derby; and from whooping-cough in Newcastle-upon-Tyne, Derby, Liverpool, Bristol, and Salford; and from "fever" in Sunderland. No marked excess of scarlet fever mortality was recorded in any of the great towns. The 37 deaths from diphtheria in the twenty-eight towns included 20 in London, 5 in Salford, 2 in Manchester, and 2 in Sheffield. No death from small-pox was registered in any of the twenty-eight towns. Four cases of this disease were under treatment in the Metropolitan Asylum Hospitals, and not one in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital were last week 1087; 86 cases were admitted to these hospitals during the week, against 87 and 91 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had declined from 510 to 375 in the preceding four weeks, further fell to 296 last week, and were 147 below the corrected average. The causes of 74, or 2·0 per cent., of the deaths in the twenty-eight towns

were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Norwich, Plymouth, Nottingham, Preston, Birkenhead, and Bolton; while the largest proportions of uncertified deaths were recorded in Brighton, Portsmouth, Liverpool, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 28·7 to 24·2 per 1000 in the preceding seven weeks, further fell to 24·1 in the week ending April 5th, but exceeded by 4·8 that which prevailed during the same week in the twenty-eight English towns. The rates in the eight Scotch towns ranged from 18·4 in Greenock and 20·5 in Paisley to 24·8 in Aberdeen and 27·0 in Glasgow. The 624 deaths in the eight towns showed a slight decline from the number in the previous week, and included 47 which were referred to measles, 33 to whooping-cough, 9 to "fever" (typhus, enteric, or ill-defined), 7 to diarrhœa, 6 to diphtheria, 3 to scarlet fever, and not one to small-pox. In all, 105 deaths resulted from these principal zymotic diseases, against 101 and 83 in the preceding two weeks. These deaths were equal to an annual rate of 4·1 per 1000, which exceeded by 2·2 the mean rate last week from the same diseases in the twenty-eight English towns. The highest death-rates from these diseases last week were 5·8 in Aberdeen and 7·8 in Leith. The fatal cases of measles, which had been 34 and 31 in the preceding two weeks, rose again to 47 last week, of which 22 occurred in Glasgow, 14 in Edinburgh, 6 in Dundee, and 4 in Leith. The deaths from whooping-cough, which had declined from 53 to 26 in the previous five weeks, rose to 33 last week, and included 14 in Glasgow, 10 in Edinburgh, and 4 in Aberdeen. The 9 fatal cases of "fever" exceeded by 5 the number in the preceding week, and included 5 in Glasgow. The deaths from diphtheria, which had been 12 and 5 in the previous two weeks, were 6 last week, of which 3 occurred in Edinburgh. The deaths referred to diseases of the respiratory organs in the eight towns, which had been 129 and 141 in the preceding two weeks, declined again to 130 last week, and exceeded by 6 the number returned in the corresponding period of last year. The causes of 65, or more than 10 per cent., of the deaths in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 30·9 and 25·9 per 1000 in the preceding two weeks, rose again to 26·6 in the week ending April 5th. During the thirteen weeks of last quarter the death-rate in the city averaged 37·0 per 1000, the mean rate for the same period being only 23·6 in London and 25·9 in Edinburgh. The 180 deaths in Dublin last week showed an increase of 5 upon the number in the preceding week; they included 6 which were referred to measles, 5 to whooping-cough, 5 to "fever," 1 to diphtheria, and not one either to small-pox, scarlet fever, or diarrhœa. Thus the deaths from these principal zymotic diseases, which had declined from 18 to 11 in the preceding three weeks, rose again last week to 17; they were equal to an annual rate of 2·5 per 1000, the rate from the same diseases being 1·9 in London and 5·8 in Edinburgh. The fatal cases of measles, which had been 6 and 3 in the preceding two weeks, rose again to 6 last week. The deaths referred to "fever" (principally enteric), which had declined from 4 to 1 in the previous three weeks, rose again last week to 5. The 5 fatal cases of whooping-cough corresponded with those recorded in the preceding week. Five inquest cases, and 4 deaths from violence, were registered; and 67, or more than a third, of the deaths occurred in public institutions. The causes of 20, or more than 11 per cent., of the deaths in the city were not certified.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major Arthur Sanderson has been placed upon retired pay (dated March 28th, 1890).

ADMIRALTY.—The following Surgeons have been promoted to the rank of Staff Surgeon in Her Majesty's Fleet (dated March 30th, 1890):—Arthur Wm. May; Alexander John James Johnston; Frederick Adolphus Trevan; James O'Brien Williams, M.D.; and Samuel Keays.

The following appointment has been made:—Surgeon Charles H. Upham to the *Cambridge* (dated April 5th, 1890).

YEOMANRY CAVALRY.—Hampshire (Carabiniers): Surgeon S. Andrews resigns his commission (dated April 5th, 1890).

VOLUNTEER CORPS.—*Artillery:* 1st Cumberland: Joseph Henry Dickson, M.B., to be Acting Surgeon (dated April 5th, 1890).—2nd Northumberland (Percy) (Western Division, Royal Artillery): Surgeon E. P. Thew, M.B., resigns his commission (dated April 5th, 1890).—*Rifle:* 1st Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon C. G. M. Lewis to be Surgeon-Major (dated April 5th, 1890).—3rd Volunteer Battalion, the Northumberland Fusiliers: William Crump Beatley, M.D., to be Acting Surgeon (dated April 5th, 1890).—1st Volunteer Battalion, the Lincolnshire Regiment: Surgeon-Major J. W. Walker, M.B., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement (dated April 5th, 1890).—2nd Volunteer Battalion, the Duke of Cornwall's Light Infantry: Acting Surgeon W. Nettle to be Surgeon (dated April 5th, 1890).—5th (Perthshire Highland) Volunteer Battalion, the Black Watch (Royal Highlanders): Acting Surgeon R. Lunan resigns his appointment; also is permitted to retain his rank and to continue to wear the uniform of the Battalion on his retirement (dated April 5th, 1890).

Correspondence.

"Audi alteram partem."

"THE PREVENTION OF RABIES AND HYDROPHOBIA."

To the Editors of THE LANCET.

SIRS,—I hope that my old friend Dr. Gordon will not think me captious if I venture to take exception to the remark with which he concludes his article with the above heading in your issue of the 29th ult. The words are as follows: "As to the expression at the present day in such common use of 'stamping out' this or that disease, it implies a process to which analogy, reason, and experience are alike adverse." I take it that with our knowledge of contagious maladies, reason urges that they can be stamped out, and experience demonstrates that reason is justified. I am one of those who contend that every contagious disease can be suppressed, and will be so, when the public are sufficiently enlightened to sanction, and agree to assist in carrying out, the necessary measures. On several occasions in this country, and also on the Continent, that terribly infectious and destructive scourge of ruminants—the rinderpest or cattle plague—has been completely extinguished by sanitary police measures, and it will not be seen again until it is introduced from those countries in which, for lack of such measures, it permanently prevails. Another very infectious and harassing fever of ruminants, foot-and-mouth disease, has been completely stamped out of this country, and will no more trouble us until we allow it to enter from abroad. In the army our troop horses used until quite recently to be decimated by glanders. By the strict enforcement of sanitary measures it has been extinguished; we have not had a case in two years, and this notwithstanding the fact that it prevails extensively in the stables of civilians. Rabies could be easily stamped out if our legislators willed it. It has been got rid of in countries which were infected—Denmark, Sweden, Norway, Baden, the island of Réunion; and it is kept out of them by careful watching; while Australasia remains free from it because a rigid quarantine is enforced in the case of imported dogs.

Therefore, reason, analogy, and experience all testify that contagious diseases can be extirpated, and this will be done when medical men and veterinary surgeons unanimously agree to advise the public that it can be done, and the public desires to have it done. How comparatively easily might not human syphilis be stamped out if sentiment and ignorance did not interpose, and the same obstacles have to be over-

come with regard to rabies—a disease infinitely more easily dealt with than that scourge of mankind.

I am, Sirs, yours faithfully.

April 9th, 1890. GEORGE FLEMING.

To the Editors of THE LANCET.

SIRS,—It would be interesting if Surgeon-General Gordon would favour the profession with the necessary references for the verification of the statements made by him in his paper on "The Prevention of Rabies and Hydrophobia" which is published in THE LANCET of March 29th, as the subject is one of pressing importance and absorbing interest at the present time, when the champions of sentimental perversion are doing all in their power to annul the efforts now being made to eradicate the direst disease which falls to the lot of humanity. If Surgeon-General Gordon is right, the advocates of muzzling are wrong; but before accepting his dicta on the subject we may justly ask for the facts upon which he bases them. Surgeon-General Gordon makes two initial statements, which are briefly these:—1. "Hydrophobia in man is not the same affection as rabies in dogs." 2. "In a very considerable number of recorded instances hydrophobia has occurred in the absence of a bite or other physical injury."

Such statements as these, boldly put forward in the very forefront of the battle, must, I cannot but suppose, be reinforced by facts to which Surgeon-General Gordon will be able to refer those members of the profession who, like myself, would meet such statements with a direct negative. For myself, I can only reply to his first statement: Firstly, that, following upon a bite from dogs suffering from rabies, I have seen a disease known as hydrophobia develop itself in man; secondly, that when a dog and a human being were bitten by a rabid jackal, the dog died of rabies and the man of hydrophobia; thirdly, that I have never met with a case of hydrophobia in the human subject independent of the bite of a rabid animal, nor am I aware of any development of hydrophobia in the human subject without precedent contact with an animal suffering from rabies. No doubt Surgeon-General Gordon is in possession of evidence in support of his statements to which I have not had access, and as his views traverse those of the best authorities, I hope he will lay the facts themselves with the recorded instances before the profession.

I am, Sirs, yours faithfully,

GEORGE RANKING, M.D.,
Surgeon-Major, Her Majesty's Indian Army.

Tunbridge Wells, March 31st, 1890.

SELECT COMMITTEE ON MEDICAL CHARITY ADMINISTRATION.

To the Editors of THE LANCET.

SIRS,—As the petition presented by the London Charity Organisation Society asked for an inquiry into the metropolitan medical charities only, and as many of us are very anxious that the inquiry be extended so as to include the provincial hospitals as well, may I ask all interested in the success of the latter desire to petition Lord Sandhurst to grant our request.

The following resolution was passed at the Leeds meeting of the British Medical Association, and has been, I understand, forwarded: "That this general meeting of the British Medical Association views with great pleasure the action of the Charity Organisation Society of London in presenting a petition to the House of Lords praying for an inquiry into the management of the metropolitan medical charities, and earnestly hopes that the scope of the inquiry will be extended so as to include the provincial hospitals and dispensaries, and thereby obtain as complete information as is possible upon this important subject. That a copy of this resolution be forwarded to the Lord President of the Privy Council; that he be requested to receive a deputation thereon; and that the Council be requested to appoint a special committee to deal with this question, and to request the Charity Organisation Society of England to form a similar committee to act in conjunction with it." But these efforts should be supplemented (*a*) by practitioners sending letters to Lord Sandhurst, (*b*) by asking the medical practitioners in Parliament to use their influence, (*c*) by asking other members of Parliament to help us, (*d*) or by forwarding petitions from medical societies, or signed by practitioners in different towns, to Lord Sandhurst. If we do not wake up and help ourselves we shall be left out in the cold, and for this we shall have ourselves to blame. Just now there is a strong desire to tackle this medical charity question, and if we in the provinces are not included, it is most likely we shall not have another opportunity for the next fifteen years.

I am, Sirs, yours truly,

Liverpool, April, 1890. ROBERT R. RENTOUL, M.D.

RELATIVE SAFETY OF ANÆSTHETICS.

To the Editors of THE LANCET.

SIRS,—The letter of Surgeon-Major Lawrie in to-day's issue of THE LANCET again draws attention to the Hyderabad Chloroform Commission and its effects on the practice of anæsthetists, respecting which I ask you to allow me to make a few remarks.

Surgeon-Major Lawrie considers that "Syme's principles have stood the test of experience, and been proved by the Hyderabad Commission to rest on a secure physiological foundation"; and that "Hyderabad students can be taught to give chloroform ..... with guaranteed safety." Now, so far as the "test of experience" is concerned, it is indeed remarkable, if not unique, that with his many thousands of cases he himself has never met with a single death. I confess that if anything should ever induce me again to give chloroform promiscuously in all cases, it would be such an experience as that with the human subject. But as to the value of the "secure physiological foundation" one may be more sceptical. For although the experiments of the Commission were most elaborate and quite worthy of Dr. Lauder Brunton's high reputation, the "practical conclusions" appended to their report appear to be inconsequent and misguiding. Possibly the one precise lesson that may be drawn from the experiments is "that chloroform may be given to dogs," and some other animals, "by inhalation with perfect safety and without any fear of accidental death, if only the respiration, and nothing but the respiration, is carefully attended to throughout." But, directly this deduction is extended to the case of human beings—as in the "practical conclusion" which states that "the administrator should be guided as to the effect entirely by the respiration," and that "his only object, while producing anæsthesia, is to see that the respiration is not interfered with,"—it meets with the strenuous opposition of the most experienced anæsthetists of the day, who consider it to be very unsafe teaching, far too hazardous for students at Hyderabad or elsewhere; whilst to the concluding paragraph of the report, which favours the exclusive employment of chloroform, and which says: "The Commission has no doubt whatever that, if the above rules be followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil," there is simply an uncompromising resistance.

Anæsthetists in England (and in India, too, if one may judge from the letter of Mr. Mitra published in THE LANCET of to-day) have not been convinced by this report that their work is capable of improvement on the lines that the Commissioners would recommend. Be it remembered that after a controversy of some twenty or thirty years in this country between the advocates of chloroform and ether respectively, in which at first the advantage was entirely with the chloroformists, it has come to be acknowledged that ether, or its congener, the handy A. C. E. mixture, is much the safer agent. In fact, if during the administration of chloroform the pulse shows signs of failure, a "whiff of ether" is credited with the capability of restoring its fulness. On the one hand, therefore, English anæsthetists, after experiments on human beings that amount to many hundreds of thousands (for "each administration may be regarded as an experiment on the action of the particular anæsthetic employed"), reject chloroform on the ground that it is not trustworthy, and advise that it should not be used where ether can be employed. On the other hand, the Commission, after 430 experiments on lower animals, would teach us that chloroform is absolutely safe for human beings, if only certain rules, which many practised anæsthetists deem questionable, be followed during its administration. Can it

be doubted on which side we in England consider the preponderance of proof to lie? The most unfavourable statistics respecting chloroform that I have seen—those of Mr. W. Roger Williams, published in THE LANCET of Feb. 8th—give the mortality as 1 in 1236 administrations. Perhaps if the Commission had performed 1236 experiments (instead of 430 only) they might have found one animal in whom their usual sequence of events—viz., stoppage of respiration before cessation of the heart's action—did not occur. Further, as the report of the Commission admits, different animals are differently affected by the same drug; pariah dogs, for example, being indifferent to the action of morphine, and monkeys and dogs being not affected by ammonia held to the nostrils as are rabbits. Why, then, should the Commission, solely from their experiments on the lower animals draw the conclusion that chloroform acts on human beings—those, moreover, not healthy, but in every phase and stage of disease—exactly as it does on dogs, monkeys, &c.?

I purposely, for brevity's sake, omit reference to the observations on ether in the report, contenting myself with the remark that, though the Commissioners think more highly than we in England of chloroform, they have nothing of real importance to urge against ether. To which anæsthetic, therefore—particularly when its inhalation can be facilitated by the previous administration of nitrous oxide gas—many anæsthetists, including myself, will continue to give the preference, believing that no other anæsthetic has yet been proved to be equally safe.

Meanwhile, one may hope that the evidence which shall finally establish the truth respecting this most important subject may receive material additions from the inquiry into the mortality under anæsthetics which you have instituted.—I am, Sirs, your obedient servant,

London, W., April 5th, 1890. GEORGE EASTES, M.B.

ROYAL COLLEGE OF SURGEONS, IRELAND: BIENNIAL PRESIDENCY.

To the Editors of THE LANCET.

SIRS,—On Monday, June 4th, 1883, at the annual meeting of the College, after full notice had been sent to every Fellow, it was proposed by Mr. Thomson, seconded by Mr. Corley, and carried, "That from and after June, 1887, the President of the Royal College of Surgeons of Ireland should be eligible and may be invited to hold office for a second year." In June, 1887, Mr. Corley was elected president, but for reasons best known to himself did not seek re-election. In 1888 Mr. FitzGibbon was elected, and, had he desired it, I would most willingly have stood aside and have allowed the will of the College to take effect. Now, I have been urged by one hundred Fellows to seek re-election in June next, and I will do so if it is the wish of the majority of the Fellows, as I only desire to do what they think is best for the interest of the College. For this reason I have addressed a circular to the large number of the Fellows whose opinions I did not already know, and beg through you to thank the eighty who have replied to me, and to express a hope that the remainder will advise me in this matter, which seems to me to be so important a change that every individual Fellow should be consulted on the subject.

I am, Sirs, yours faithfully,

April, 1890. AUSTIN MELDON, President R.C.S.I.

TOXIC EFFECTS OF CANNABIS INDICA.

To the Editors of THE LANCET.

SIRS,—The value of cannabis indica as a remedy is so real that it is of the utmost importance to determine if possible to what the uncertainty of its action is due. For upwards of the last fifteen years I have used cannabis indica frequently and with manifest advantage, and on only two occasions do I remember unpleasant physiological effects therefrom, once from a single dose of half a grain of an extract, and once recently from two single doses of one-third of a grain repeated at an interval of eight hours. These exceptions I attribute either to some idiosyncrasy in the individual, or, and less likely, to some special activity of the extract. I was early led to endorse the opinion of one of our great authorities that the most reliable preparation of the drug is the extract prepared by Messrs. Squire of Oxford-street. The action of this extract, however, is liable to unequal results, but never, in my experience, to uncertainty of action.

Some five years ago, and again this week, I called on Messrs. Squire, and learned from them that from the time Dr. O'Shaughnessy first introduced gunjah or cannabis indica into England, and gave some to the late Mr. Peter Squire for conversion into an extract, up to the present day that their firm has been continuously supplied by the original collectors of the plant, and each sample has proved good, yielding efficient preparations. A point of practical importance and interest, however, is this, that Messrs. Squire have found that the active principles vary in different specimens of the plant from year to year, so that as manufacturers they cannot predicate the actual degree of potency to be attributed to an extract or tincture prepared under identical conditions, until the preparation has been adequately tested for any given year. This leads me to remark on the necessity of using cannabis indica with due care as to dose at the onset; and, granting this is done, to express my belief that it will be found a safe and most valuable sedative and hypnotic in the insomnia of renal disease, the jactitation of senile chorea and paralysis agitans, and in menorrhagia, as well as in migraine and persistent headache and allied conditions. To separate the essential from the accidental opens up an important field for research in reference to the component alkaloids existing in cannabis indica, on which it may be hoped analytical chemistry will ere long be able to give valuable information.

I am, Sirs, yours faithfully,

Oxford-terrace, W., March 19th, 1890. H. CRIPPS LAWRENCE.

"MEDICAL PHARMACY."

To the Editors of THE LANCET.

SIRS,—I am sorry to see that none of your readers better qualified than I have answered Dr. Wood's letter of March 28th, with regard to the College of Physicians of London not allowing its members to dispense. The fact that no member can "engage in trade" or "dispense medicine" puts the diploma in many respects above most of the degrees in medicine, and is, I believe, one reason why many hospitals place the possessors of the diploma of the London college on a different footing from those holding that of the Edinburgh college.

I think Mr. James Stewart has some right, as mentioned in THE LANCET of April 5th, to complain that the members of the Dublin College are not put on the same footing with regard to hospital appointments in England as those of the London College, as both diplomas are safeguarded in the same way, but I do not see why he includes those of Edinburgh, as a member of the latter College may, and in some cases does, keep an open surgery or run a penny dispensary. We want in our profession less dispensing, amongst the upper ranks at least. I am, Sirs, yours truly,

April 8th, 1890. DISPENSING M.D.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Newcastle.

A SCHEME for the removal of the infirmary to the neighbourhood of the Moor was mooted for the first time at the last quarterly meeting by Alderman Stephens, one of the governors. It is well known that the surroundings of the infirmary are open to serious objections, and that these objections are likely to increase as time goes on. On the one hand there is a noisy cattle market, and on the other the constant traffic of an extensive goods station, while the atmosphere is polluted by the smoke from the river Tyne and from Gateshead. It was mentioned that the late bequest of £10,000 from Mr. Fleming might be used as a nucleus for a building fund, which will require at least to be raised to £100,000. Alderman Stephens must be content to see his proposition shelved for a while pending the ripening of public opinion, but there is no doubt that the removal of the infirmary to a more

eligible situation is a question that must be faced, and that soon. — At the last annual meeting of the Nurses' Home, over which Professor Philipson presided, it was stated that there were now in the home thirty-four trained nurses and seven probationers; still the demand for nurses was increasing, and it would be necessary to enlarge the staff. In all, the nurses had attended nearly 500 cases during the year. Dr. Page and others spoke of the value of the Home, and of the great need for its extension and further support by the public.—Walker may now almost be considered a suburb of Newcastle, but the medical officer of health, Mr. Frazer Hurst, justly draws attention to an anomaly as regards the terms of admission to the large Infectious Diseases Hospital of the borough of Newcastle at Walker Gate. Mr. Hurst says that although arrangements have been made with the authorities for the use of Walker patients and also for the disinfecting oven, yet the high price of admission demanded—namely, 30s. per week from each patient—rendered it impossible for the working classes to take advantage of the institution on their own account, and that the cases in which he would be called upon to take action as medical officer and order to be removed to the Infectious Diseases Hospital at the expense of the township would be comparatively few. Mr. Hurst's remarks on this matter afford an illustration of how the usefulness of a large and costly building can be minimised by parsimony.

Durham County Hospital.

Miss Clara Waddington, last surviving sister of the late Dean Waddington, of Durham, whose death recently occurred in London, has by her will bequeathed the handsome sum of £2000, free of legacy duty, to the funds of the Durham County Hospital. The late Dean was himself a liberal supporter of the hospital. Miss Waddington had also followed in her brother's footsteps as a generous contributor.

Middlesbrough.

At a general meeting of the governors of the North Riding Infirmary, Middlesbrough, held last week, it was mentioned that the ward closed in 1884 from failing revenue had, at the urgent request of the medical staff, been refurnished and reopened. Sir Raylton Dixon had intimated that he intended founding a child's cot, in commemoration of the Princess of Wales's visit to Middlesbrough, and he hoped to obtain the consent of the Princess to its being called the "Alexandra cot." He had sent, in addition, the handsome donation of fifty guineas.—The following members of the profession have been added to the list of borough magistrates for Middlesbrough: Messrs. John Hedley and S. Walker.

Phosphorus Poisoning at Bedlington.

A case of poisoning by phosphorus has taken place at Bedlington, in a miner's daughter, aged twenty-one, who confessed to having used matches when in a state of mental depression. She was attended by Dr. J. T. McLaren, who deposed at the inquest that he had attended her for six days previously to her death, and her only definite symptom was jaundice, and that this was followed by coma and death.

Newcastle-on-Tyne, April 10th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

EDINBURGH.

Influenza and the Weather.

THE other day an interesting paper prepared by Sir Arthur Mitchell, M.D., and Mr. Buchan, Secretary of the Scottish Meteorological Society, was read before that Society, in which it was stated that in London during the years from 1845 to 1890 the mortality from influenza was specially great during the last four and the first eight weeks of each year, this mortality varying inversely to the temperature, the number of deaths being highest when the temperature was lowest, just as in the case of diseases of the respiratory system. During these forty-five years there have been five periods in which the figures pointed to the existence of an epidemic in 1847–8, 1851, 1855, 1857–8, and 1889–90. During the whole period there were 4609 deaths due to influenza, 2687 of these, or 57 per cent., occurring during the five epidemic periods. In the first of these periods (1847) there was a mortality of 1631. In 1850–51 the epidemic occurred during the spring, and the death-rate was comparatively small; and in 1855 there were 120 deaths, most of which were registered in the early part of the year, as far as the end of March. In the next epidemic the mortality reached its maximum in the first week in December; whilst in the last epidemic the rise commenced about the middle of December, and increased to the third week of January, after which it steadily fell. It is curious to observe that, if the weather of the epidemic periods is examined, the temperature is found to be much above the mean, this being the case in every instance, so that it may be concluded that cold has nothing to do with the epidemic nature of the influenza, but that the epidemic occurs in exceptionally warm weather. It was found that during the period of the present epidemic the total mortality from all causes had been much above the average, influenza accounting for only one-seventh of the whole increase. From an examination of the statistics collected, the authors of the paper have come to the conclusion that the diseases which contributed essentially to the increase were those of the nervous system, of the circulatory system, and particularly those of the respiratory organs; whilst diarrhœa, dysentery, liver disease, erysipelas, typhoid fever, and measles contributed a far lower mortality than usual. With reference to the spread of the disease, Sir Arthur Mitchell and Mr. Buchan state that they believe that the disease is probably spread, not by the surface winds of the earth, but by means of cyclones, by which it may be carried in every direction, two or at most three days being amply sufficient time for its distribution over Europe. In the discussion that followed on the paper, Mr. Buchan said that a most interesting investigation would be one into the distribution of cholera germs, as it was well known that they were spread from east to west in the teeth of the surface winds of the globe.

Edinburgh University Examinations.

It is stated that no fewer than 325 candidates have presented themselves at the first professional examination this month, whilst an even larger number are said to have appeared at the written second professional examination. This latter is probably the largest number that has ever appeared at any single second professional examination in the history of the University of Edinburgh.

Royal Society.

At a sparsely attended meeting of the Royal Society recently held, a paper was read from Dr. J. Oliver on an inquiry concerning Spontaneous Generation. The gist of the paper was that it was extremely probable that life might have arisen from the coming together of the atoms of which living matter was composed, and that it was quite as reasonable to suppose that the process might be going on at present as that it had been going on at the time of the first appearance of life on our planet, or that life was the result of a special creation. It is to be feared that Dr. Oliver did not make many converts to his views amongst the Fellows of the Royal Society.

The Health of Edinburgh.

The Health Returns for the month of March and for the first quarter of the year are now before me. During March the death-rate was 20·62 per 1000 of the population, compared with an average death-rate for the corresponding month of the last five years of 19·54. Of these deaths, 41·20 per cent. of the total were those of persons under five years of age, 36·05 per cent. those between five and sixty years of age, and 22·74 per cent. those above sixty years of age. Diseases of the chest proved fatal in 35·62 per cent. of the whole; zymotic disease accounted for 18·66 per cent.; and 9·1 per cent. were due to old age. During the first quarter of the year the death-rate was exceedingly high, being 23·39 per 1000, compared with an average death-rate for the corresponding quarter for the last five years of 18·88. It was reported that during March there had been seized in Edinburgh 15,435 lb. of diseased meat, so that there has evidently been considerable activity amongst the meat inspectors.

New Appointments.

It is announced that the Council of the Royal College of Physicians have appointed Dr. D. Noel Paton to the

post of superintendent of their research laboratory. Dr. Paton is certainly well qualified to hold the post; he is a most enthusiastic investigator, and has already published many valuable papers on various branches of physiological chemistry. He is also a most successful lecturer and teacher, and it may be confidently predicted that, under his superintendence, reports of good work will continue to issue from the research laboratory of the Royal College of Physicians.

At a recent meeting of the directors of the Royal Hospital for Sick Children, Dr. Alexander Bruce was elected to the post of Pathologist, in succession to Dr. Woodhead, who is removing to London.

Edinburgh, April 8th.

ABERDEEN.

Graduation Ceremony at Marischal College.

Of the fifty-five candidates who presented themselves for the final examination in Medicine only twenty-five satisfied the examiners. Three of the successful candidates were under age, and the others were "capped" at Marischal College on Thursday, the 3rd inst. Mr. Hugh Fraser, M.A., gained the Fife-Jamieson Medal in Anatomy; Mr. G. W. H. Tawse, the Keith Medal for Systematic and Clinical Surgery; and Mr. Wm. Findlay, M.A., the Shepherd Medal for Systematic and Practical Surgery. Twenty-four candidates passed the first half of the first professional examination; sixty-five completed the first professional examination; and thirty-six passed the second professional examination.

Medical Jurisprudence and Public Health.

The Professor of Medical Jurisprudence in the University is also Lecturer on Public Health, and, besides the special class conducted by him in the laboratory, he includes in his lectures on Medical Jurisprudence several on Public Health; and during the last few years questions on the latter subject have formed no small part of the professional examination in Medical Jurisprudence. This the students consider a grievance, and not in accordance with the ordinances. As a result of the dissatisfaction, the gentlemen who graduated last week sent the following protest to the secretary of the University Court: "We, the undersigned graduates in medicine of Aberdeen University, hereby protest against Public Health being made a compulsory part of the professional examination in Medical Jurisprudence, seeing that, in violation of the ordinances which specify Medical Jurisprudence alone as being the subject for examination, one-third of the recent written examination was purely on Public Health, and in several instances the oral examination by the examining professor was confined solely to questions on Public Health. And we hereby appeal to the University Court to enjoin that in future the examination in Medical Jurisprudence be conducted in accordance with the ordinances."

The University Court.

A meeting of the Aberdeen University Court was recently held in Marischal College. Among other things, the above protest, signed by twenty-one graduates, was considered. Considerable discussion took place as to the powers of the Court in the matter. Professor Hay stated that, in his opinion, Public Health did constitute a part of Medical Jurisprudence; but the students, he said, were of a different opinion, and this was a cause of irritation. Dr. Angus Fraser condemned the system of oral examinations as conducted in the University, and moved, "That a committee be appointed to inquire into the manner in which examinations for degrees in Medicine are conducted; to make suggestions as to what changes, if any, are required to make the examinations more satisfactory as a test and to report." This motion he, however, withdrew, and it was agreed, on the motion of Dr. Webster, "reserving all questions of competency," to remit the matter to the Senators to be considered and reported upon.

Aberdeen, April 8th.

ILKLEY HOSPITAL AND CONVALESCENT HOME.—At the annual meeting of the subscribers to this institution the report was read, in which it was stated that during the year the cost per patient amounted to £1 10*s.* 7*d.*, against £1 9*s.* 3*d.* in 1888. From the balance-sheet it appeared that the balance against the treasurer amounted to £127.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

DUBLIN.

The Presidency of the College of Surgeons.

IN referring last week to the resolutions adopted by the Council and Fellows on the question of a biennial presidency, I omitted to draw attention to a resolution carried in June, 1883, at the annual meeting of the College, to the following effect:—"That from and after June, 1887, the President of the Royal College of Surgeons, Ireland, should be eligible, and may be invited, to hold office for a second year."

Mater Misericordiæ Hospital.

Although this institution has nearly 300 beds, yet it does not contain a separate wing for the reception of fever patients, a want which was much felt during the recent epidemic of typhoid. It is now contemplated to remedy this deficiency, and as there exists ample space for the erection of the proposed wing on the northern side of the hospital, an appeal has been made for the necessary funds to provide the required accommodation.

South Dublin Union Workhouse.

The half-yearly report (March 24th) of Mr. Robinson, Local Government Board inspector, of this workhouse is generally satisfactory. The expenditure for out-door relief and stimulants was not excessive, but the numbers in receipt of relief in the workhouse continue very high. The overcrowding in the lunatic wards will shortly be relieved, as the guardians have obtained a loan for the purpose of carrying out some structural changes in the house, which will greatly improve the accommodation for this class. Mr. Robinson states that the classification of inmates is far from perfect, as there are healthy, aged, and infirm and sick in every wing of the building; and he believes that a proper system could be arranged by placing all the female sick in the old schools, all the male sick in Mr. E. Kenny's hospital, and keeping the main wings of the house for the aged and infirm and the healthy.

International Medical Congress, Berlin, 1890.

The following are the members of the Organising Committee for Ireland of the approaching Tenth International Medical Congress: Sir William Stokes (chairman), E. H. Bennett, Sir John Banks, K.C.B., D. J. Cunningham, J. M. Purser, S. Gordon, C. Nixon, W. Thomson, A. Fraser, and W. McKee.

Grangegorman Barracks.

The new barracks situated at Grangegorman, close to the Phœnix Park, are intended for the accommodation of a cavalry regiment of a first army corps strength. One important matter—that of drainage—has been attended to most carefully, and these barracks, now nearly completed, have been provided with separate systems of pipes for the storm-water, sewage, and subsoil drainage. These systems do not communicate with each other inside the barracks but empty into a common disconnecting pit, which is drained by a large iron sewer across the railway to a town sewer in Aughrim-street.

Dublin, April 8th.

BELFAST.

The Belfast Eye and Ear Hospital.

FROM the medical report read at the annual meeting of this hospital, held on March 24th, I learn that during the past twelve months 980 cases of eye disease, 291 cases of ear disease, and 180 of throat affections have been treated in the extern department; and 94 cases of eye, ear, and throat diseases were treated in the wards, making a total of 1543 cases treated during the year. Twenty senior students are receiving clinical instruction during the present session. The certificate of attendance at the hospital is recognised by the various examining boards. The following changes have been made in the staff: Mr. Samuel Browne (who founded the hospital) becomes consulting surgeon; his son, Dr. John Walton Browne, is appointed honorary attending surgeon; and Dr. W. Calwell has been selected to succeed him as assistant surgeon. Owing to the generosity

of Lady Johnston five extra beds, with all the requisite furniture for the patients, have been added to the institution.

Irish Diplomates and Honorary Appointments in England.

A special meeting of the Ulster Medical Society was held on March 25th, to hear an address from Mr. James Stewart of Clifton on "The Disabilities of Irish and Scotch Diplomates for Honorary Staff Appointments in English Public Hospitals." Mr. Stewart, in the course of his remarks, pointed out the unfair rules that existed in many English hospitals in regard to the staff appointments, which were so framed as to exclude Irishmen being eligible as candidates. He was sorry to say that an organisation which was established to educate public opinion in this matter—the Irish Medical Schools' and Graduates' Association—had, out of a roll of 640 members, only seven members practising in Belfast, while in Dublin the number was 130. Dr. Lindsay moved the following resolution, which was passed: "That in the opinion of this meeting the exclusion of Irish diplomates from honorary hospital appointments in England is extremely illiberal, and contrary in every way to the spirit of the Medical Act of 1858."

Belfast, April 8th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The late Professor Ulysse Trélat.

To the brief notice of the death of Professof Ulysse Trélat in THE LANCET of last week I may be allowed to add the following note. His obsequies took place on Monday morning at the Madeleine Church, which, although a very large building, was well filled with mourners of both sexes, among whom were noticed several of the notabilities of Paris, both in and out of the profession. The funeral procession was most imposing, and as the deceased was a Commander of the Legion of Honour, he was interred with military honours. The Academy and Faculty of Medicine, as well as the different learned societies to which the deceased belonged, were officially represented. The bier was literally covered with wreaths and flowers, and the body was conveyed to the cemetery of Montmartre, where several speeches were delivered over the grave, Professor Tarnier representing the Faculty of Medicine, Dr. Péan the Academy of Medicine, and Dr. Terrier the Société de Chirurgie. M. Jules Ferry, formerly Minister of State and a personal friend of the deceased, delivered a discourse in the most touching terms. Dr. Trélat has left a large amount of scientific work behind him. For some time he had taken an active part in the discussions of the societies to which he belonged, and it will be remembered that at the Academy of Medicine he was prominent in the discussions on the prophylaxis of tuberculosis. He was an able surgeon, and the operations he preferred were generally autoplastic. Among these operations, those which he most studied were the restorations of the hard and soft palates, in which branch he obtained great reputation. He made several communications on this subject to the Academy of Medicine, and published an article in the *Revue de Chirurgie* (1885), containing the *technique* of the operation and an account of the phonetic results obtained. In later years he occupied himself particularly with affections of the uterus, including displacement of that organ. He was a great partisan of *curettage*, which operation he preferred to intra-uterine cauterisations for the cure of the different forms of metritis, and his last communication to the Société de Chirurgie was on this subject. When he fell ill he was preparing a work on the cure of aneurysms, to which he attached great importance. It is to be hoped that his pupil, to whom we are indebted for this information, will take up the subject and publish it in respectful memory of his deceased master. Some years ago Dr. Trélat had devoted himself to abdominal surgery, ovariotomy, and salpingectomy, which he practised with great success. The pupil just referred to, who writes anonymously, observes that it was impossible to overestimate this fundamental quality of his character—the incessant striving after an ideal perfection difficult to realise. It is that which permitted him to remain, notwithstanding his age, in the van of surgery, taking up new suggestions with all the ardour of youth, though without its undue enthusiasm. He was a sworn enemy to that school of surgery the followers of which, being always armed, believe that they can dispense with diagnosis. He decided to intervene only when he thought that the diagnosis was sufficiently complete for the indications and conditions of operative interference. Notwithstanding his reputation as a surgeon, he had not a very extensive practice, and this was owing to his brusque manner, but those who knew him intimately were well aware that this abruptness was unintentional. He was a most eloquent speaker, and he always produced a great impression whenever he spoke, whether as a lecturer or as a debater, at the Academy of Medicine, or at the different Societies to which he belonged. As a mark of respect to his memory, the Academy of Medicine and the Société de Chirurgie suspended their meetings for the day which followed his funeral.

Chloroform v. *Ether.*

Owing to a recent chloroform accident, the Director of Public Assistance caused a report to be made on the surgical operations which have been performed during the last ten years in the hospitals of Paris. As a result of this report, it appears that the accidents due to the employment of chloroform have been in the proportion of 1 in 1236; those due to ether have been only 1 in 12,581 cases.

Presentation to M. Pasteur.

According to the *Semaine Médicale*, a committee, composed of British and American celebrities, has been formed to present M. Pasteur with an album. On the first page of this album is inscribed in French, under the signature of the Prince of Wales, "To the great Monsieur Pasteur, the benefactor of the human race." The album is to be presented to the illustrious biologist after the Easter holidays.

Paris, April 8th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Death of Professor Loewig.

PROFESSOR LOEWIG of Breslau, the oldest teacher of chemistry in Germany, died on the 27th ult., aged eighty-seven. He was born at Kreuznach on March 17th, 1803, studied chemistry at Heidelberg, became apothecary in his native town, completed his chemical studies in Berlin, and established himself as a private lecturer at Heidelberg in 1830. Three years later he was called to Zurich as Professor of Chemistry, and was appointed Bunsen's successor at Breslau after a stay of about twenty years in Switzerland. He made his home in Breslau for the rest of his life. His chief works are his "Text-book of Chemistry" (1832), "On the Ingredients and Origin of Mineral Springs" (1837), "Chemistry of Organic Combinations" (1839), "On the Formation and Composition of Organic Combinations," "Outlines of Organic Chemistry" (1852), "Jer. Benjamin Richter, the Discoverer of Chemical Proportions." A great sensation was caused by his last scientific publication on poisoning by arsenic, in which he endeavoured to obtain a new trial for a man who had been condemned to penal servitude for life for poisoning his wife.

The Chair of Mental Therapeutics.

Professor Grashey of Munich has been appointed to succeed the late Professor Westphal in the Chair of Mental Therapeutics in Berlin. He was born at Groenenbach, in Bavaria, in 1839, and studied at Würzburg, Vienna, and Berlin, under Rinecker, Meynert, and Gudden. His first important post was that of head of the lunatic asylum at Deggendorf, in Lower Bavaria, after which he was appointed ordinary professor at Würzburg and chief of the mental department in the Julius Hospital there. After the death of Gudden, who perished in the Starnberger See with his patient, King Ludwig II. of Bavaria, in 1886, Grashey was appointed professor of mental therapeutics and head of the lunatic asylum in Munich. In addition to a number of minor writings on the nature and treatment of mental disease, he has published two important works, entitled "The Undulation of Elastic Tubes and the Arterial Pulse in Man" and "Compression and Compressibility of the Brain." He has also edited the works of his predecessor, von Gudden.

The Victoria House for the Care of the Sick.

The Society called "Victoria House for the Care of the Sick," of which the Empress Frederick is patroness, held its fourth annual meeting on the 30th ult. There are now eighty-five sisters and nineteen pupils. It has now for the first time become possible for the Society to undertake methodically the care of the sick in their own homes, and ten of the sisters have been engaged in this work since November. The main field of the Society's labours is the Berlin hospital Friedrichshain, where fifty of the sisters and one pupil were employed at the close of last year. Seven sisters and eight assistants were employed last summer, and two sisters during the winter, by the Society for Children's Hospital Homes on the German Coasts. At the patroness's wish two sisters were sent last October to Kronberg in the Taunus Mountains, where her Majesty has a country seat, to tend the sick poor there.

The Chair of Pharmacology in Bern.

Dr. Tschirch, private lecturer in the Berlin University, has been appointed Professor of Pharmacology in Bern. He was originally an apothecary, and afterwards devoted himself chiefly to botany. His special field is the chemical physiology of plants, and the main theme of his investigations has been the structure and qualities of chlorophyll. Along with Friedrich Flückiger he has written a handbook of pharmacology, and is now writing a handbook of the anatomy of plants. With the help of funds granted by the Berlin University he made a journey of research in the tropics about a year ago.

Professor Theodor Leber.

Professor Leber of Göttingen has been appointed the late Professor Becker's successor as Professor of Ophthalmology and head of the University Eye Infirmary at Heidelberg. He is a pupil of Helmholtz, Ludwig, and Graefe. Since 1871 he has been ordinary professor and head of the Eye Infirmary at Göttingen. He has written on the blood-vessels of the human eye, the circulation of the blood and nutrition of the same, the diseases of the retina and of the optic nerve, &c., and has been for some years past the editor of *Graefe's Archiv für Ophthalmology*, the most respected German periodical of its kind. He is a native of Karlsruhe, and his age is fifty.

Dr. Felix Wolff.

Dr. Felix Wolff of Hamburg has been appointed head physician of the famous Hospital for Diseases of the Lungs founded by the late Dr. Brehmer, the father of the modern treatment of consumption, at Goerbersdorf, in Silesia. Dr. Wolff has been for several years assistant to Professor Curschmann, of the great Hamburg hospital, and has devoted special attention to diseases of the lungs. He enters on his new office to-day.

Hospitals for Pulmonary Patients.

The representatives of the medical societies of Berlin met last week, with Professor Leyden in the chair, and unanimously resolved to take up the question of the erection of hospital homes for pulmonary patients of the poorer classes near Berlin, appointing Professors Leyden, B. Fraenkel, and Fraentzel to take the necessary steps.

Dr. Eugen Hahn, the well-known head of the surgical department of the Berlin hospital at Friedrichshain, has received the title of professor, a very rare distinction in the case of men who are not university teachers in the medical profession, though not rare in the domain of arts.

The annual meeting of the Women's Military Hospital Society was held on the 29th ult., under the presidency of its new patroness, the Empress. Minister von Gossler and Surgeons-General von Coler and Mehlhausen were present.

The town clinic and the diphtheria pavilion of the new Children's Hospital in the north of Berlin will be opened next June. It is hoped that it will be possible to open the scarlet fever pavilion in autumn.

"Norway and its Climatic Resources for the Treatment of Disease" is the title of a new book by Dr. Daubler, published by Habel of Berlin.

Professor Vierordt of Jena has been appointed to succeed the late Professor von Dusch at Heidelberg. His age is only thirty-four.

The Society for Mental Therapeutics will celebrate the memory of its late President, Professor Westphal, in the hall of Berlin University in the course of this month.

Dr. Volmer, Privy Councillor in sanitary matters, retired from his post as chief physician of St. Hedwig's Hospital (the Catholic hospital) here on April 1st, after twenty-seven years' service—four as assistant and twenty-three as head physician.

In honour of the International Medical Congress which is to meet here in August, the city authorities will publish a book on the Medical Institutions of Berlin.

Berlin, April 1st.

Obituary.

EDWIN HUMBY, M.D. ST. AND.

THE subject of this notice was born May 9th, 1820, and, inasmuch as he became by examination a Licentiate of the Society of Apothecaries in 1841, and a Member of the Royal College of Surgeons in the following year, he evidently wasted no time as a student. Indeed, those who knew him as a pupil at Lane's School affirm that he was always a diligent and zealous worker. He was particularly neat and clever with his fingers, and some dry dissections which he made as a student, and which he presented to the anatomical museum of St. Mary's Hospital a few years since, give ample evidence that he was not only an excellent practical anatomist, but that he did not grudge the time which he devoted to gaining a sound knowledge of the science. His clinical work was carried on at St. George's Hospital. After obtaining his diplomas Dr. Humby purchased a partnership with the late Mr. Yorke, in the neighbourhood of Hamilton-terrace. For nearly fifty years Dr. Humby continued in active practice in St. John's Wood, in which district, indeed, few persons were better known. He was an admirable type of the "family practitioner," and with a keen hatred of everything savouring of advertisement or obtrusion. Without any seeking on his part, he acquired not only the confidence but the affection of his patients; and when one saw him at the side of the sick bed one instinctively became impressed with a knowledge of the fact that, behind a manner which was always cheerful and happy, there was a gentle and sympathetic heart. It was little wonder, then, that at the funeral service which Canon Duckworth held in St. Mark's Church on the last morning in March, many of Humby's professional brethren as well as friends and patients gathered together to pay him, as it were, their last tribute of respect. And when the choir were singing, "Now the labourer's task is o'er," it possibly struck more than one of the mourners that Humby had invariably laboured as an honest English gentleman. Though always an industrious practitioner, Dr. Humby was by no means a slave to his profession, and those who enjoyed the privilege of intimacy with him recognised him as a man of unusual social qualifications. Within the last year or two, however, it became evident to his friends that his health and vigour were failing; yet still, with the help of his friend and neighbour, Dr. Edward Lewis, he continued to do a certain amount of work. During his last illness, which was partly of the nature of a general sclerosis and partly of the nature of a broncho-pneumonia, he was devotedly attended by Dr. Lewis and Dr. Bristowe; but, becoming gradually weaker, he quietly passed away in the early morning of March 27th, leaving a wife and daughter to cherish his loved memory.

DR. ACHILLE SACCHI.

AT Mantua, on the 17th ult., died Dr. Achille Sacchi, eminent as a physician and Italian citizen, but more especially so for his services on the medical staff of Garibaldi's "Red Shirts." Shortly after graduation in medicine he threw himself with ardour into the patriotic cause, and in the campaign against Austria in 1848–9 he was one of the most efficient officers, alternately combatant and medical, in the famous "Colonna Mantovana," or Mantuan column. He earned the esteem and the friendship of such thinkers and men of action as Cattaneo and Bertani, and in a conspicuous manner of Garibaldi himself, who used to say that it was difficult to tell for which career Sacchi was more richly endowed—that of surgeon or soldier.

After the campaign of 1866 and the cession of Venetia,

by which Italy wanted nothing but Rome and the patrimony of St. Peter to complete her unity, Dr. Sacchi returned to his native Mantua and devoted himself to the good of his fellow-citizens by every means at his command—by professional practice, by education, and by example. In politics he remained frankly Republican, but that did not prevent him from co-operating most loyally with his compatriots of every political complexion and religious creed for the common weal. His latest appearance in public was his *éloge*, read before the Società Virgiliana, on his professional brother and companion in arms, Dr. Giacometti. This effort, a very noble work of thought and language, he left as his political testament. On the 18th his remains were cremated and consigned to the tomb in the presence of a large assemblage of his fellow-citizens, many of whom had come from remote parts to testify their esteem for his character and their admiration of his career.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a quarterly meeting of the Council of the College, held on Thursday, the 10th inst., the minutes of the Extraordinary Council of March 27th were read and confirmed.

The President reported that, in pursuance of the provisions of the Bradshaw Bequest, he had "chosen" Sir T. Spencer Wells, Bart., as the Bradshaw Lecturer for the present year, and that the lecture would be delivered at some convenient date in November or December.

It was agreed that, as recommended by the Museum Committee, in pursuance of the resolution of the Council of June 14th, 1888, Mr. Boulenger be employed to complete the cataloguing of the remaining sections of the Osteological Series of the Museum—viz., the Reptilia and Amphibia, and the Fish.

It was also agreed that, as recommended by the Library Committee, the books mentioned in the list submitted by the librarian be presented to the University of Toronto, provided that the librarian shall find, after communicating with the Secretary of the Library Restoration Committee, that the books in question will be of value to the University.

Sir W. S. Savory, Bart., offered to the Council, on behalf of Miss Lawrence, manuscript documents the property of her father, the late Sir Wm. Lawrence. These were accepted unanimously with the best thanks of the Council.

It was agreed that, as recommended by the Committee for General Purposes, additional accommodation be provided in the library.

The Jacksonian Prize for the past year for the essay on the Pathology, Diagnosis, and Surgical Treatment of Intracranial Abscess and Tumour, was awarded to Mr. W. G. Spencer, F.R.C.S. The subject of the Jacksonian Prize for the ensuing year, 1891, is the Pathology and Treatment of Diseases of the Knee-joint.

A letter of the 29th ult. from Dr. Liveing, Registrar, was read, reporting the adoption by the Royal College of Physicians of the Report, dated March 19th, 1890, of the Committee of Delegates of the two Colleges on the Scheme for the Reconstitution of the University of London, and the appointment of eight delegates to act with the delegates of the Royal College of Surgeons at the conference to be held with the Committee of the Senate of the University of London. The Council resolved to adhere to their previous decision, to appoint only four delegates to represent them at this conference.

The following motion, which was proposed by Mr. Willett and seconded by Mr. Hill, was carried: "That the whole question of the instruction of students in ophthalmic surgery and of the manner in which their knowledge of this subject shall be tested, certified, or otherwise approved, be referred to the Committee of Examiners to report thereon to the Council."

INSANITARY CONDITION OF GRAYS.—At a meeting of the Grays Local Board on the 27th ult. the Works Committee directed attention to the existing insanitary condition of the sites upon which certain dwellings were built, and recommended cleaning out underneath the floors and filling up the spaces with cement. The committee decided to approve of these recommendations, and to construct a cesspool thirty feet from the houses.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—In addition to those enumerated in our last issue, the following gentlemen passed the Second Examination of the Board in Anatomy and Physiology at recent meetings of the Examiners:—

A. Ellison and J. M. Nicol, of Yorkshire College, Leeds; R. P. Lawson, A. Hooton, A. H. McDougall, and J. D. Willis, of Owens College, Manchester; C. R. Batchellor, R. B. James, and J. A. H. White, of Queen's College, Birmingham; E. A. Duffield and R. C. Leonard, of Bristol School of Medicine; M. Ashley, of University College; F. J. Carter and J. M. Flavelle, of St. Bartholomew's Hospital; F. E. Rock, of Middlesex Hospital; H. L. Barnard and J. D. Jenkins, of London Hospital; V. T. Greenyer, H. B. Maingay, and J. S. Sloane, of St. Bartholomew's Hospital; C. Planck, W. Redpath, E. Smith, and K. B. J. Vickers, of St. Thomas's Hospital; H. Davies and F. T. Travers, of University College; B. W. Nankivell, of Middlesex Hospital; A. E. Hine and H. E. Oldfield, of Charing-cross Hospital; R. E. G. Phillips, of Guy's Hospital; D. C. Longden, of Edinburgh University; T. H. J. C. Goodwin, of St. Mary's Hospital; J. T. Sear, of St. Thomas's Hospital; R. H. Castellote, of University College; H. W. Newton, of Middlesex Hospital; W. J. Johnson, of Guy's Hospital; E. E. Francis, of St. Bartholomew's Hospital; Harry Cogill, H. A. D. Dickson, and W. Stokes, of St. Thomas's Hospital; E. H. Helby and N. J. Smith, of Middlesex Hospital; C. N. C. Walch, R. C. Tweedy, and A. C. Underwood, of St. Bartholomew's Hospital; C. P. T. Edwards, A. D. Heath, S. R. Schofield, and A. Y. Fullerton, of University College; W. S. H. Sequeira, of London Hospital; G. C. Hayes, of Melbourne and King's College; C. F. Warren, of St. Mary's Hospital; R. H. Moon, of Guy's Hospital; K. D. McDougal and E. K. Perrine, of St. Bartholomew's Hospital; B. H. Kingsford, G. V. Benson, J. C. Durston, and E. P. Wrinch, of St. Thomas's Hospital; J. W. W. Stanton and W. E. Fry, of London Hospital; G. E. Mould and F. J. Poynton, of St. Mary's Hospital; T. H. Symons, of Charing-cross Hospital; W. F. Lucas and H. B. Long, of Middlesex Hospital; A. Gaskell and E. J. Smyth, of University College; A. J. Sharp, C. S. Pantin, J. W. Taylor, and R. C. Kirkby, of Guy's Hospital; W. Mansell-Woodhouse, T. S. Good, and N. Elrington, of St. George's Hospital; A. H. Woodcock and H. G. Toombs, of St. Thomas's Hospital; M. W. W. Curtis and A. M. Mills, of Middlesex Hospital; S. C. Creaswell, F. G. Hopkins, and H. D. Eccles, of Guy's Hospital; S. A. Bull and T. E. Harper, of Westminster Hospital; A. R. Rendle and H. S. Elliott, of St. George's Hospital; F. N. Grinling, D. Keele, Isaac Costa, and C. Read, of University College; W. Shears, K. Rogers, W. N. Soden, and H. M. Sylvester, of St. Bartholomew's Hospital; D. O. Thomas, of Indiana and St. Bartholomew's Hospital; H. J. Cummings, of Trinity University, Toronto.

Anatomy only.—G. R. Swinhoe, of St. Thomas's Hospital; A. P. Brice, of Westminster Hospital; B. W. Swenden, of St. George's Hospital; Horace Potts, of University College; J. H. Compton and O. C. Worthington, of Guy's Hospital; Baron Brooke, of King's College; A. E. Weston, of St. George's Hospital; W. W. Hodgins and H. S. Revell, of University College Hospital; A. A. Macfarlane, of St. Bartholomew's and Mr. Cooke's School of Anatomy and Physiology; A. G. Cooley and E. Morton, of Sheffield Medical School; F. A. Robinson, of Guy's Hospital; C. J. Harrison, of University College; E. C. Frend, of St. Bartholomew's Hospital; G. E. Kinnersly, of St. Thomas's Hospital; H. W. Hull, of London Hospital; F. G. Dorey, W. Faull, and E. Howgate, of Yorkshire College, Leeds; S. A. Coad, of Leeds and St. Mary's Hospital; P. F. Howden, of Bristol School of Medicine; J. E. Hickman and H. H. Rubra, of Queen's College, Birmingham; H. W. Nott, of University College, Liverpool; H. A. Howes, of Owens College, Manchester; H. E. Pittway, of Middlesex Hospital; E. H. Worth and A. Marshall, of St. Thomas's Hospital; T. Streatfield, of University College; C. M. Greenway and J. J. E. Biggs, of Guy's Hospital; H. L. Powys, of London Hospital and Mr. Cooke's School of Anatomy and Physiology; S. P. Hopewell, of London Hospital; B. A. Lukmani, of Bombay and Mr. Cooke's School of Anatomy and Physiology; F. Wall, of Ceylon and Mr. Cooke's School of Anatomy and Physiology; J. E. H. Phillips, T. Stevens, and W. A. Powell, of Charing-cross Hospital; and A. C. Durham, of London Hospital and King's College.

Physiology only.—C. F. P. Baly and C. T. Van Geyzel, of University College; H. J. Clark, of St. Thomas's Hospital; F. A. M. Flegg, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; S. Infield, of Guy's Hospital; H. E. Dalby, of Charing-cross Hospital; A. W. Welson, of Melbourne and Middlesex Hospital; R. B. Williams, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; V. Foote, of Charing-cross Hospital; R. L. Meade-King, of St. Bartholomew's Hospital; P. S. Eves, of University College; E. G. C. F. Atchley, A. L. Flemming, and W. R. Hadwen, of Bristol Medical School; T. H. Wilkins, of Queen's College, Birmingham; L. N. Gibbes, of St. George's Hospital; B. Cooper, of St. George's Hospital; P. Northcote and C. Hodgson, of St. Thomas's Hospital; P. V. Hughes and R. W. Prentice, of King's College; E. H. Smith and R. R. H. Wonnacott, of London Hospital; W. B. Winckworth, of Westminster Hospital; W. W. Lacey, of St. Bartholomew's and Mr. Cooke's School of Anatomy and Physiology; G. E. Clarkson, of St. Bartholomew's Hospital; F. S. Dukes, of Guy's Hospital; R. Evans, of University College, London, and Owens College, Manchester.

UNIVERSITY OF ABERDEEN.—The following candidates have passed the required examinations for degrees in Medicine and Surgery:—

Degree of M.D.—G. Leslie H. Milne, M.A., M.B., C.M., Forres; Robt. Shiels, Edinburgh; John Souter, M.A., M.B., C.M., Burghead.

Degrees of M.B. and C.M.—James A. Bruce, Glenrinnes; *William Bulloch, Aberdeen; Hugh F. Cameron, Aberdeen; †Hugh G. Cowie, M.A., Turriff; †William Davidson, Oldmeldrum; Henry G. Deans,

M.A., Dunecht; Robert C. Duthie, M.A., Woodside; Peter Fowlie, Stornoway; Thomas Holt, Burnley, Lancashire; James M. Key, Montrose; John B. Lendrum, Huddersfield; †J. R. Levack, Aberdeen; Alex. B. Lyon, Banff; William Macbain, Aberdeen; William S. Park, M.A., St. Fergus; †James Rannie, Glenbucket; Arthur H. Rideal, Preston; James H. Skeen, Aberdeen; John Smith, Insch; John A. Sutherland, Argyllshire; C. W. T. Stephenson, Aberdeen; Henry P. Taylor, Alnwick; James Wilson, M.A., Banchory.

* Highest Academical Honours. † Honourable distinction.

The Diploma in Public Health will be conferred on William C. Dale, M.A., M.B., C.M., St. Helens, and George Reid, M.D., Stafford.

CONJOINT SCHEME OF THE COLLEGES OF PHYSICIANS AND SURGEONS IN IRELAND.—The following candidates have passed the Conjoint Preliminary Examination:—

Holmes Beamish, J. A. Beaumont, Jennie Boyd, R. C. Hamilton, C. A Hayman, E. Hogan, D. R. Love, G. Martin, H. V. Mayne, W. C. M'Cann, E. F. M'Donnell, L. F. Strangman, M. P. Strangman, W. F. Thomline, W. A. Twigg, E. Tynan, M. L. Walsh, E. Ward, and F. C. Yorke.

UNIVERSITY OF OXFORD.—The Regius Professor of Medicine gives notice that the final examination for the degree of Bachelor of Medicine will commence on Monday, June 9th, at 9.30 A.M., in the Examination Schools. The examination for the degree of Master in Surgery will take place on Thursday, June 19th. The first examination for the degree of Bachelor of Medicine will commence on Monday, June 30th, at 9.30 A.M.

UNIVERSITY OF DUBLIN.—The following honours have been awarded in the Anatomy class for session 1889–90:—Second Year Division—First class honours: C. E. Stokes, prizeman; R. H. Torney, George Beare, W. Heard, A. F. Dixon, E. W. Wade, R. Heard, and G. F. Johnston (equal). Second class honours: J. S. Owens, F. Heron, J. G. Hearn, R. H. Kennan, R. H. Steed, R. W. Henry, and A. Moore (equal); H. Eustace, A. Mussen, F. Kiddle, R. J. Coulter, and E. Montgomery (equal). Junior Division—First class honours: F. E. Wynne, prizeman; J. S. Morton, W. Haughton, and A. Thornton. Second class honours: J. Power, E. P. Moore, G. E. Flemyng, and W. R. Fenton.

THE DOGS' HOME, BATTERSEA.—The annual report shows that during 1889 the total number of dogs received into the Home was 24,123, an increase of 8802 on the previous year, to be attributed no doubt to the seizures under the muzzling order. As to the alleged epidemic of rabies among the 24,123 dogs admitted, notwithstanding the stringent detective means taken by the institution, only 13 instances of the disease were discovered.

NEW HOSPITAL FOR DERBY.—The Contagious Diseases Hospital at Derby is now completed, and was opened for public inspection on Tuesday and Wednesday. The buildings are situated on what are locally known as the Chaddesden Hills, commanding an extensive view of the surrounding country. The hospital is erected on the most approved principles which govern institutions of such a nature. The plans were prepared by the late borough surveyor, Mr. Coulthurst, and the building is considered the most complete of its kind in the kingdom.

FOOTBALL CASUALTIES.—Recently, in a football match at Selkirk between the teams of the Selkirk and Galashiels Football Clubs, a man named Mathison sustained a fracture of the right leg below the knee.—On the 26th ult., in the final football tie at Belfast for the Irish Rugby Union Cup, between the Belfast Albion Club and the North of Ireland, a player (a member of the former club) fractured one of his legs, and another player of the opposing team sustained such injuries to the head that he was removed from the field in an unconscious state.—Last week a young man named Smith, of St. Helens, aged nineteen, during the progress of a Rugby football match between St. Helens (A) and West Leigh at West Leigh, slipped and fell, his head being crushed down upon his chest, producing a fracture of the spine and paralysis, from which he subsequently died.—On the 4th inst. Henry Wharmby, of the Everton Athletic Football Club, whilst playing in a match against the Fifth Irish, was charged by M'Ardle, and sustained a fracture to the collar-bone and dislocation of the shoulder.—Albert Madeley, aged twenty-three, residing in Bridge-street, Wednesbury, was admitted on the 5th inst. into the West Bromwich Hospital suffering from a fracture of the right collar-bone, sustained in the afternoon while playing in a football match at Wednesbury.

THE LEPERS AT THE CAPE.—Sir Henry Loch, the Governor of Cape Town, laid the foundation stone of the new leper hospital on Robben Island on the 8th inst.

MEDICAL MAYOR.—Ernest William Skinner, M.B., C.M., has been unanimously elected Mayor of Winchelsea, one of the ancient towns of the Cinque Ports.

THE Town Council of Blackburn has resolved to apply to the Local Government Board for sanction to borrow £10,000, for the purpose of erecting a new hospital for infectious diseases.

NAVAL MEDICAL SUPPLEMENTAL FUND.—At the quarterly meeting of the directors of the Fund held on the 8th inst., T. Russel Pickthorn, Esq., Inspector-General, in the chair, the sum of £51 was distributed among the several applicants.

THE WEST HAM HOSPITAL.—The Duke of Westminster will open this building on the 23rd inst. It will accommodate at once twenty-four male and female patients and also children. Funds are still needed to complete the furnishing.

CHILDREN'S HOSPITAL, SHEFFIELD.—The report submitted to the annual meeting, held in the Cutlers' Hall on the 28th ult., congratulates the governors and subscribers on the sustained success and utility of the institution. Compared with 1888, there was during the year an increase of both in- and out-patients treated, and the medical report and the statement of accounts were alike satisfactory.

A NEW SCOTTISH HOSPITAL IN PROSPECT.—The residue of the estate of the late Mr. Thomas Hope, a wealthy native of Scotland, who died last month in Connecticut, U.S.A., is, by the terms of his will, to be devoted to the establishment and maintenance of a hospital, to be named after the testator, and to be situated at Langholm, Dumfriesshire, where he was born.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—The reports on the questions issued by the Committee of Collective Investigation last September are due on or before April 15th. The committee will also be pleased to receive any suggestions as to subjects suitable for the next inquiry. All communications to be addressed to the Secretary, Mr. Arthur Thomson, Anatomical Department, Museum, Oxford.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for efficient vaccination in their respective districts:—Mr. J. Gower O'Neill, public vaccinator for the fourth and fifth districts of the Southwell Union.—Mr. J. W. White, L.K.Q.C.P. Irel., M.R.C.S., of Nailsea, public vaccinator for the fifth district of the Bedminster Union.—Dr. F. W. Lewis, public vaccinator for the No. 1 District of the Llandovery Union.

MEDICAL MAGISTRATE.—Dr. Joseph Ewart, F.R.C.P. Lond., of Montpelier Hall, Brighton, representative of St. Nicholas Ward on the Town Council and member of the School Board, has been appointed a magistrate for Sussex by the Lord-Lieutenant of the county. Dr. Ewart is a retired Deputy Surgeon-General of Her Majesty's Indian Army, and was formerly at different times Professor of Physiology and Medicine in the Medical College, Surgeon to the European General, and a Municipal Commissioner at Calcutta.

PRESENTATION TO MR. C. H. HOPKINS.—The members of the Bath City Police Force on the 28th ult. presented to Mr. Culliford Hopkins, police surgeon, with a handsome silver punch-bowl, on which was inscribed: "Presented to Henry Culliford Hopkins, Esq., M.R.C.S., by the members of the Bath Police Force, in recognition of his undeviating kindness and attention; 28th March, 1890." In making the presentation, the Chief Constable referred to the many acts of kindness which they had all received at the hands of Mr. Hopkins when requiring medical attendance, and therefore he asked that gentleman's acceptance of a token of their respect and esteem. In accepting the gift, Mr. Hopkins said he did so with feelings of great pleasure. If they had received any kindnesses from him, he had also received many from them, and he should look back upon that occasion, and also his connexion with the Bath Police Force, with feelings of pleasure and joy. He hoped on some future occasion to drink from the bowl the health of all those who were present.

A NEW HOSPITAL AT RUTLAM, CENTRAL INDIA.—The formal opening of this hospital took place on Feb. 28th last at Rutlam, by Mr. Henvey, the agent to the Governor-General for Central India, at the request of the Rajah of Rutlam, K.C.I.E. The hospital has been erected by his Highness in memory of his first wife. It is conveniently situated in Rutlam city, and will be a great boon to the inhabitants of that city and state.

BEQUESTS AND DONATIONS TO HOSPITALS.—Mr. John Shapland, late of Hill House, Cradley, Herefordshire, left by his will £20 a year for twenty years to the Worcester Infirmary.—The late Mr. Philip Falk, of 23, Palace-gardens, Kensington, bequeathed £200 to the Jew's Hospital, West Norwood.—By the will of the late Dr. R. F. Ainsworth, of Cliffpoint, Lower Broughton, Manchester, £250 each is left to the Manchester Royal Infirmary and the Salford Royal Hospital and Dispensary.—The Rev. Cuthbert Hackett has left £50 each to the Adelaide Hospital, Dublin, and the Royal Hospital for Incurables.

COUNTY COUNCILS AND MEDICAL OFFICERS OF HEALTH.—At a meeting of the Birmingham and Midland Branch of the Society of Medical Officers of Health, held on the 3rd inst. at Birmingham, it was unanimously resolved—"That this meeting welcomes the appointment of medical officers of health for County Councils, but is of opinion that it is desirable in the public interest that the county medical officer should also hold office as a medical officer for any local sanitary district within the same county, but should act solely as consulting sanitary adviser to the County Council."

FOOD AND DRUGS ADULTERATION ACT.—It will afford satisfaction to our readers to know that Mr. Morgan's question addressed recently in the House of Commons to the Home Secretary has been so far effectual. On Wednesday, April 9th, at Lambeth Police Court, the manager of the Suburban Wine Company, Victoria-road, Peckham, was fined £20 and costs for diluting whisky twenty-six degrees below the legal standard. A similar penalty was inflicted on the manager of the Peckham Co-operative Stores for selling coffee adulterated with 80 per cent. of chicory. Arthur Willis, East Dulwich, was fined £10 and 12s. 6d. costs for adulterating coffee with 45 per cent. of chicory.

UNHEALTHY DWELLINGS.—A demonstration was held on Monday in the Victoria Park, at which there were three platforms for speakers, and attended by some thousands of persons, to protest against the inactivity of the Government and local authorities in respect of the insanitary condition of the slums and hovels inhabited by the poorer classes in the East End of London. The ultimate result of the meeting was the adoption of a resolution condemning the Government and local authorities in not enforcing the sanitary laws, and pledging the meeting to support Mr. Sturt's Bill to give the County Council compulsory powers to demolish insanitary dwellings, and erect healthy and cheaper tenements in their place.

THE MEDICAL SOCIETY OF LONDON.—On Monday, April 14th, Mr. Meredith will read a paper on the "Present Position of Abdominal Surgery" at this Society. The debate which will follow will be adjourned to April 21st. It is hoped that Sir Spencer Wells and Dr. Keith will speak. Amongst those from a distance who have signified their intention of speaking may be mentioned—Dr. Greig Smith, Bristol; Mr. Mayo Robson, Leeds; Dr. Griffiths, Swansea; Dr. John Taylor, Birmingham; Mr. Lawson Tait; Dr. Elder, Nottingham; Dr. Thomson, Dublin; Dr. Thomas Savage, Birmingham; and Dr. David Newman, Glasgow. The President, Mr. Knowsley Thornton, is expected to speak on the second night of the debate.

THE BATLEY CORPORATION.—The attainment, last week, of the majority of this corporation has been celebrated by demonstrations and civic festivities in honour of the event. The Mayor presided at a public banquet held at the Masonic Hall, which was attended by a large company. The usual loyal toasts having been drunk, that of "The Houses of Parliament" was proposed by Dr. Alfred Swann (the medical officer of health for the borough, and also an officer of the Volunteer Corps). In the course of an amusing and highly interesting speech, he referred to the advantages of a municipal authority, and to the sanitary and other improvements which had been effected in the town since its incorporation. Other toasts followed, and the entertainment was brought to a close.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at midnight on April 8th, 1890.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever	Other diseases.	Total.	
Eastern Hospital	184	22	..	19	1	226	442
North-Western Hospital	103	16	..	8	..	127	415
Western ,,	139	11	..	10	..	160	292
South-Western ,,	136	..	..	..	..	136	350
South-Eastern ,,	148	18	1	26	5	198	462
Northern ,,	343	32	..	10	..	385	584
Totals	1053	99	1	73	6	1232	2515

SMALL-POX.—*Atlas* hospital ship, 4.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BENHAM, HARRY ARTHUR, M.D., C.M. Aber., L.S.A. Lond., has been appointed Medical Superintendent of the City and County Lunatic Asylum, Fishponds, near Bristol.

BONAR, T. M., M.B., C.M. Glas., has been appointed Medical Officer for the Probus District of the Truro Union, vice Caddy, deceased.

GEDDIE, WM., M.D. Aber., has been appointed Medical Officer for the Second Accrington District of the Haslingden Union.

GREENWOOD, M., jun., M.D. Brussels, L.R.C.P. Lond., has been appointed Medical Officer for the Haggerston West District, St. Leonard, Shoreditch.

HARRIS, A. W., M.R.C.S., has been appointed Medical Officer to the Southampton Corporation.

HIGGINS, H. LA HUERTA, L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon to Addenbrooke's Hospital, Cambridge.

HOOD, GEORGE, M.D. Edin., has been reappointed Medical Officer for the Tow Law Union District.

JAMIE, R. W., M.B., C.M. Edin., has been reappointed Medical Officer for the Ashby-de-la-Zouch Rural District.

JONES, HUGH R., M.A., M.B. Cantab., B.Sc. Lond., has been appointed Honorary Assistant Surgeon to the Liverpool Hospital for Cancer and Skin Diseases.

KYLE, T. W., M.D. Qu. Univ. Irel., has been reappointed Medical Officer for the Ashby Woulds Union District.

LEON, JOHN T., B.Sc. Lond., F.I.C., F.C.S., has been appointed Demonstrator of Chemistry and Assistant Lecturer on Physics to St. Mark's Hospital Medical School, Paddington.

LIMRICK, W. S., L.R.C.P. Edin., has been reappointed Medical Officer for the Great Crosby Union Districts.

MACGREGOR, D. A., M.B. Edin., C.M., has been reappointed Medical Officer for the High Hoyland Division of the Penistone Rural District.

MONAGHAN, T. J., L.R.C.P. Edin., has been appointed Medical Officer for the First Accrington District of the Haslingden Union.

PEAKE, W. P., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fourth District of the Leicester Union.

POWELL, WILLIAM, L.R.C.P., M.R.C.S., has been appointed Surgical Registrar to Westminster Hospital.

RAYMENT, E. W., B.Sc., M.B. Edin., has been appointed Medical Officer for the Second District of the Pewsey Union.

SWALLOW, F. MCDONALD, L.R.C.P. Edin., has been reappointed Medical Officer for the Silkstone District of the Penistone Union.

WEBSTER, W. H., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glas., has been appointed House Surgeon to the Morpeth Dispensary, vice G. G. Gidley, M.R.C.S., L.R.C.P., L.S.A., resigned.

WILSON, A. C. J., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer for the Penistone Rural District.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—A vacancy in the Honorary Acting Out-patient Staff. (Apply to the Hon. Secretary, 43, Waterloo-street, Birmingham.)

BOLTON INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £100 per annum, increasing by £10 per annum to 150, with furnished apartments, board, and attendance.

BROMPTON AND KNIGHTSBRIDGE PROVIDENT DISPENSARY, 12, Hans-road, S.W.—Two Medical Officers.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Resident Medical Officer for one year. Salary £80 per annum, with board and residence.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester.—Resident House Surgeon. Salary £100 a year, with furnished rooms and attendance.

COSTA RICA, CENTRAL AMERICA.—Physician to take charge of Hospital in connexion with a railway. (Apply to M. C. K., THE LANCET Office, 423, Strand, W.C.)

HENDON RURAL SANITARY AUTHORITY.—Sanitary Medical Officer. Salary £100 per annum (Apply to Mr. W. A. Tootell, Clerk, Edgware.)

HOLBORN UNION, Clerk's Offices, Clerkenwell-road, E.C.—Assistant Medical Officer at the Infirmary, Archway-road, Upper Holloway, N. Salary £100 per annum, with board, lodging, and washing.

LANCASTER COUNTY ASYLUM, Whittingham.—Pathologist. Salary £200 a year, with board, lodgings, washing, and attendance.

LONDON COUNTY ASYLUM, Colney Hatch, N.—Medical Superintendent for the whole Asylum. Salary £1000 per annum, with a house supplied with planned furniture, coal, gas, milk, and vegetables.

NEWPORT INFIRMARY, Newport, Mon.—Resident Medical Officer. Salary £120 per annum, with board and residence. (Apply to A. M., at the Infirmary.)

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant to House Surgeon for six months only. No salary, but board, residence, and washing provided.

NORTH-WEST LONDON HOSPITAL, Kentish-town-road.—Medical Officer; salary £50. Also Assistant Medical Officer; no salary. Each Officer is provided with board, residence, and washing. Both appointments are for six months.

OWENS COLLEGE, Manchester.—Demonstrator in Materia Medica and Pharmacy. Stipend £100 per annum.

QUEEN'S HOSPITAL, Birmingham.—House Physician; salary £50, tenable for one year. Also House Surgeon; salary £50, tenable for one year. Also Obstetric and Ophthalmic House Surgeon; salary £10, tenable for six months.

RANGOON MUNICIPALITY.—Health Officer to the Municipality. Salary Rs. 600 per mensem, rising by annual increments of Rs. 50 per annum to Rs. 1000. (Apply to Mr. J. Short, Secretary, Rangoon Municipality.)

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck-street, W.—Honorary Physician.

ST. SAVIOUR'S UNION.—Second Assistant Medical Officer at the Union Infirmary, East Dulwich-grove, Champion-hill, S.E., for one year. Salary at the rate of £100 per annum, with furnished apartments, board, and washing.

SUFFOLK GENERAL HOSPITAL.—Honorary Assistant Medical Officer.

WESTERN MEDICAL SCHOOL, Glasgow.—Lecturer on Surgery.

YORK COUNTY HOSPITAL.—Senior House Surgeon. Salary £100, with board and residence.

Births, Marriages, and Deaths.

BIRTHS.

CARTER.—On March 30th, at South Camp, Aldershot, the wife of Surgeon-Major Sidney H. Carter, M.B., Medical Staff, of a daughter.

KINGZETT.—On April 6th, at Trevena, Amhurst-park, N., the wife of C. T. Kingzett, F.I.C., F.C.S., of a daughter.

NORTON.—On April 3rd, at Upper Gloucester-place, Dorset-square, the wife of G. Everitt Norton, M.R.C.S. &c., of a son.

WOOLLERTON.—On March 31st, at Wendover, the wife of E. G. Woollerton, surgeon, of a son.

MARRIAGES.

DALZELL—WILSON.—On April 2nd, at Craig-park, Dennistoun, Glasgow, Arthur John Wilson Dalzell, M.B., C.M., Malvern, to Janet Hamilton, second daughter of the late John Wilson, of Glasgow.

DIXON—HAUGHTON.—On April 2nd, at the residence of the bride's father, by special licence from his Grace Lord Plunket, Archbishop of Dublin, Augustus Edward Dixon, M.D., Professor of Chemistry, Queen's College, Galway, eldest son of Wakefield H. Dixon, Esq., Belfast, to Nina, eldest daughter of Wilfred Haughton, Ardnehue, Howth.

MILNE—HARPER.—On April 7th, at the British Embassy, Rome, George Leslie Hodgson Milne, M.D., of Forres, eldest son of the Rev. A. J. Milne, LL.D., F.S.A. Scot., of Fyvie, to Mary Lewis, elder daughter of the late Alexander Harper, of Torre al Prato, Florence.

DEATHS.

COWIE.—On Easter Day, at Greencroft-gardens, N.W., Surgeon-General A. J. Cowie, Inspector-General of Civil Hospitals (retired Bengal), aged 56.

DANGERFIELD.—On April 7th, at Moreton House, Cheltenham, George Nicholas Dangerfield, M.D., aged 76.

GIBBON.—On April 3rd, at Queen's-terrace, Aberdeen, Alexander Gibbon, late Deputy Inspector-General of Hospitals, Bengal Presidency.

HANKS.—On April 7th, at Snaith, James Hanks, M.D., J.P. for the West Riding of Yorks, aged 83.

LIGHTBURNE.—On April 5th, at Rosemount, Bessbrook, Joseph Lightburne, M.D., aged 74.

LISTER.—On Nov. 6th, near Santa Ana, in Bolivia, South America, Charles Edmond Lister, B.A., M.R.C.S., younger son of the late John Lister, Esq., J.P., of Shibden Hall, near Halifax, aged 41.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, April 14.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-sq., W.C.).—8 P.M. Mr. Henry Sewell: Some Points in the Etiology and Pathology of Dental Caries, illustrated by Photo-micrographs of the Tissues exhibited on the Screen by Mr. Andrew Pringle, and the Original Slides shown under the Microscope.—Mr. W. Scott Thomson: On Splicing Dental Engine Cords.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Meredith: The Present Position of Abdominal Surgery.

Tuesday, April 15.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Hon. G. C. Brodrick: The Place of Oxford University in English History.

SOCIETY OF ARTS.—8 P.M. Mr. C. Purdon Clarke: Modern Indian Art.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Brigade-Surgeon Myers: Perforating Ulcer of Duodenum.—Mr. Hurry Fenwick: Spontaneous Fracture of Urinary Calculus.—Mr. Buckston Browne: Spontaneous Fracture and Re-union of Vesical Calculi.—Mr. Anthony Bowlby: Melanotic Epithelioma (two specimens).—Mr. E. Solly: Melanotic Carcinoma of Labium.—Mr. James Berry: Fibro-chondroma of Tongue.—Mr. D'Arcy Power: Fracture of Patella from Direct Violence.—Dr. Montague Murray: Four Sacculated Aneurysms arising from Dilated Aortic Arch.—Mr. Jonathan Hutchinson, jun.: Calcareous Nodule of Skin. Card Specimens:—Dr. H. D. Rolleston: Separation of Symphysis Pubis.—Mr. Shattock: Necrosis Silla of Digital Phalanx.

Wednesday, April 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. W. West: Fresh-water Algæ of North Wales.—Mr. M. M. Hartog: The State in which Water exists in Live Protoplasm.

SOCIETY OF ARTS.—8 P.M. Mr. Talbot B. Reed: Old and New Fashions in Typography.

Thursday, April 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

ROYAL INSTITUTION.—3 P.M. *Prof.* C. V. Boys: The Heat of the Moon and Stars. (Tyndall Lecture.)

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. T. E. Lane: Urethral Chancres.—Dr. Sidney Phillips: On the Symptoms connected with the Circulation in Diphtheria.

Friday, April 18.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—9 P.M. Sir F. Bramwell: Welding by Electricity.

Saturday, April 19.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

ROYAL INSTITUTION.—3 P.M. Capt. W. de W. Abney: Colour and its Chemical Action.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 10th, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Apr. 4	30·15	N.E.	40	39	91	59	36	..	Hazy
,, 5	30·13	N.E.	43	40	91	59	37	..	Bright
,, 6	29·91	S.W.	53	48	84	57	41	..	Overcast
,, 7	29·52	S.W.	49	47	91	57	47	·08	Raining
,, 8	29·67	W.	45	40	97	54	40	·03	Cloudy
,, 9	29·89	N.	44	43	84	49	40	·14	Cloudy
,, 10	29·73	N.E.	41	39	59	45	38	·05	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

RELICS OF BARBARISM IN THE GERMAN UNIVERSITIES.

WITH all their learning and teaching power, the German universities retain some rather unlovely traditions, of which duelling is perhaps the most redolent of barbarism. True, the vast majority of "hostile meetings" between undergraduates seldom result in more than facial disfigurement; but sometimes, when firearms are the weapons chosen instead of swords, danger is inevitable, and even death may occur. A melancholy illustration of this has lately been witnessed at Wurzburg, where a highly promising and amiable "candidatus medicus" lost his life. Paul Fleurer, the unfortunate youth in question, seems to have played a truly chivalrous part in the encounter; for after a first, and then a second, interchange of shots, he held out his hand twice in token of reconciliation with his antagonist, but in vain. A third interchange was insisted on, and poor Fleurer fell mortally wounded, and died in a few minutes. At his funeral, which was attended by the students in large numbers, and with all the insignia of mourning, *oraisons funèbres* were delivered, the principal of which referred to the deceased as the victim of an "unfortunately still prevailing prejudice"—surely an inadequate condemnation of a practice which finds no favour in the better-mannered academic life of Great Britain and America.

Ainger.—The rule varies in different places, and our correspondent should find out the rule in the town he has settled in, and observe it.

Macgra.—The brief record is of little value without a statement of the physical condition of the patient.

Dr. Lloyd Tuckey.—The paper, when forwarded, shall have our attention.

DISLOCATION OF THE GREAT TOE.

To the Editors of THE LANCET.

SIRS,—This being an uncommon accident, the following account may prove of interest.

A few days since I was called to see a farmer who had hurt his foot the same day whilst keeping off a rather ferocious pig that had turned on him. On inspecting the foot I found the whole of the great toe dislocated backwards from the metatarsal bone, the base of the first phalanx protruding under the skin over what should have been the metatarso-phalangeal joint. Reduction was easily effected by making the patient strongly flex the ankle-joint, the great toe meanwhile being grasped between the thumb and finger of the right hand, whilst the dislocated base of the phalanx was pressed up between the finger and thumb of the left hand. On gently exercising traction, the dislocation was reduced with a loud snap.—I am, Sirs, faithfully yours,

Moreton Hampstead, March 31st, 1890. FRED. G. ENGELBACH.

PRACTICE AT THE CAPE.

To the Editors of THE LANCET.

SIRS,—I have just returned from Kimberley, and the copy of THE LANCET of Jan. 25th has followed me back. I can quite endorse all that your correspondent, "Medicus Capensis," has written. Some additional information about Kimberley may, however, be interesting to your readers.

Although the second town in the colony, medical practice at Kimberley is now very much cut up, and the chances of a stranger succeeding are remote. All the natives engaged in the diamond mines, and numbering between 7000 and 8000, sign contracts for three months, during which time they are compounded within the mining area, and have no communication with the outer world. Very good hospital accommodation is provided within the compound, and an efficient dispenser resides there, who is quite competent to look after all the minor casualties which are constantly occurring. A paid medical attendant visits the compound daily, and is summoned in cases of graver character. He is paid from £300 to £400 a year, according to the number of Kafirs under his charge. The white *employés* are associated in benefit societies. The De Beer's and Central are the two largest mines, and they each pay about £300 a year for the services of a medical man. The dispensing is let off by contract to a chemist, and the medical man has his consulting-rooms at the same establishment. This is a peculiar and objectionable feature in the practice of Kimberley; but nearly all the medical men associate themselves with some chemist, and have rooms at his shop. Rarely do medical men profess even to see patients at their own residences. The police and detective force, with their wives and children, are contracted for by Government, and the medicines prescribed by the medical attendant are dispensed by an elected chemist. There are societies of Foresters, Oddfellows, Good Templars, &c., each electing a medical attendant. The Government also provides a district surgeon, whose duties are numerous and widespread, connected with the coroner's court, gaol, and the homeless waifs and tramps who may sicken and die in the locality. There is a very good and well-conducted hospital, with about 200 beds. A portion is free, but a large section is appropriated to the use of men and women who can afford to pay for the attention they are in need of. The charges vary from 5*s.* to 15*s.* a day for board and nursing only; the medical fees are a separate charge. About two-thirds of the population of Kimberley are thus medically provided for by contract, and a new settler can only hope to pick up his patients from the remaining third, and he will find amongst them Malays, Dutch, Hottentots, Chinese, Indian Coolies, and Kafirs, who are very much readier to summon a doctor than to pay for his services.

I am, Sirs, yours faithfully,

Styal, Cheshire, March 24th, 1890. JOHN DRUMMOND.

"A NEW OPERATION FOR THE RELIEF OF ENTROPION."

To the Editors of THE LANCET.

SIRS,—Mr. Thomas Evans of Sydney has described in THE LANCET of the 5th inst. a new operation for the relief of entropion and distichiasis. I suggested an almost similar one in the early part of 1889 in the *Medical Press and Circular*. He separates a wedge of cilia and tarsal cartilage, and has them depressed inwards and downwards, everting the lids, believing that the cartilages must have been inverting them. I, on the other hand, believe the pathology to be that submucous lymph and conjunctival cicatricial bands which produce what are called "granular lids" are the cause of entropion, as well as distichiasis, and that by dissecting off from the integument to the fullest depth, as is done for transplanting a strip from the mouth or otherwise between the integument of the lid and conjunctiva, there is no necessity for anything further. The natural elasticity of integument and cartilage will evert the lid when the traction of the conjunctival bands is removed.

I am, Sirs, yours truly,

Kingstown, April 8th, 1890. JOHN ROCHE, M.D.

"INSTRUMENT FOR RELIEF OF RETENTION OF URINE."

To the Editors of THE LANCET.

SIRS,—I am obliged to Mr. W. J. Hepburn for having called my attention and that of your readers to an instrument introduced by him, through Messrs. Fannin and Co., four years ago. I had never seen Mr. Hepburn's instrument until yesterday, and I was much surprised that he should have written (*vide* THE LANCET, March 29th) that his instrument was "in every particular identical" with mine. If Mr. Hepburn will send to Messrs. Arnold and Sons for the instrument I described (*vide* THE LANCET, March 22nd), and place it alongside of his own, he will observe that some of the serious inconveniences of the combined whip bougie and catheter are present in his and absent in mine. This would be a practical and conclusive comparison. Mr. Hepburn has evidently not carefully read the description of my instrument.

I am, Sirs, yours faithfully,

Liverpool, April 5th, 1890. A. E. DAVIS.

"NEEDLES OF HYPODERMIC SYRINGES."

To the Editors of THE LANCET.

SIRS,—"M.D." may have the information concerning the above by referring to THE LANCET of April 6th, 1889, page 718.

I am, Sirs, yours faithfully,

Leith, N.B., April, 1890. WM. M'CREADIE.

"MURDER OR SUICIDE."

To the Editors of THE LANCET.

SIRS,—I quite concur in the views expressed in an annotation in THE LANCET of this week under the above title. Twice within the last twelve months or so it has come under my notice as coroner that a suicide (where no possible doubt existed as to the fact of self-infliction of the wound) can, and did, notch the vertebræ. So much impressed was I with these cases that I advised all the medical men then present in my court to go to the mortuary and examine the cases for their own edification.

I am, Sirs, yours truly,

Camden-road, N.W., April 4th, 1890. R. MACDONALD, M.D.

Mr. Arthur Webster should consult our Students' Number, published in September last.—1. Yes.—2. Vacancies are advertised.

Mr. W. Francis (Minneapolis).—We have no recollection of having ever published any prescription of the kind.

A. B.—The fee can be claimed by the principal in the absence of special agreement.

R. F. B.—We do not think there would be any appreciable risk incurred.

Mr. Cooper Harrison.—We will communicate with the writer.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Keetley, London; Dr. E. Warren-Bey, Paris; Dr. Parsons, Vienna; Dr. More Madden, Dublin; Dr. R. Macdonald; Dr. J. W. Moore; Mr. Jordan Lloyd, Birmingham; Mr. E. Owen, London; Mr. Haslam, Birmingham; Mr. Hatherly, Nottingham; Dr. W. A. Kidd; Mr. Leudesdorf; Dr. Willoughby, London; Dr. Altdorfer, Cork; Dr. D. Freire, Rio Janeiro; Dr. Atkinson, Surbiton; Mr. Whipple, Kew; Dr. Armand Ruffer; Dr. Stone, Montrose; Dr. Crossman, Hambrook; Mr. Cripps Lawrence, London; Mr. A. E. Davis, Liverpool; Messrs. Blondeau et Cie., London; Mr. A. R. Anderson, Nottingham; Messrs. Street and Co., London; Mr. Warman, Eastbourne; Mr. J. A. Lowson, Hong-Kong; Dr. Rentoul, Liverpool; Mr. Abbott, Braintree; Mr. Arthur Thomson, Oxford; Dr. Fisher, Lytham; Mr. Creadie, Leith; Mr. A. Meldon, Dublin; Mr. A. G. Miller, Edinburgh; Mr. J. R. Tunmer, Harrogate; Dr. Kirk, Partick; Dr. Morrison, Suez; Mr. J. E. Squire, Plymouth; Mr. J. Gray, Bristol; Dr. Thresh, Chelmsford; Mr. J. B. Browne, London; Mr. Clarke, Cambridge; Dr. Herschell, Finsbury; Mr. Norton, London; Mr. Knowles, Barnsley; Miss Cohen, Birmingham; Dr. Ewart, Brighton; Mr. A. F. Chapple; Dr. A. H. Smith, New York; Dr. Strong, Ross; Dr. Taylor, Derby; Mr. Stamford, Tunbridge Wells; Mr. Somers, Holbeach; Dr. G. N. Pitt, London; Messrs. Van Houten and Zoon, Holland; Dr. R. Pratt, Leicester; Messrs. Walker and Bontal, London; Mr. G. M. Evans, Bridport; Messrs. Seabury and Johnson, London; Mr. H. Burton, Marple; Messrs. Durie and Son, Ottawa; Mr. W. F. Clark, Cheshunt; Messrs. Longmans and Co., London; Mr. A. Webster, Waterhouse; Messrs. Robertson and Scott, Edinburgh; Mr. Tyte, Minchinhampton; Messrs. Mitchell and Co., London; Mr. Pitt, Warwick; Mr. Bower, Leyland; Messrs. Head and Sons, Coventry; Mr. Branthwaite, Worcester; Messrs. Fenwick and Chinery, London; Dr. R. J. Lee, London; Messrs. Dukes and Co., Berlin; Dr. Edwards, Calcutta; Miss Parker, Devon; Dr. Wood, Tennessee, U.S.A.; Dr. Roche, Kingstown; Dr. Robinson, Cockermouth; Mr. Hensley, Lifton; Mr. Vacher, Birkenhead; Dr. Brewis, Tasmania; Mr. Morton, Glasgow; Mr. Carter, Stamford; Mr. Clarke, Notting-hill; Mr. Thorburn, Manchester; Mr. Browning, Sheffield; Mr. Frost, London; Mr. Nason, Paistow; Dr. Bonar, Cornwall; Mr. J. Carter, London; Mr. Bertwhistle, Mentone; Mr. Brereton, Portarlington; Mr. Sharpin, Salisbury; Mr. Hallen, Alloa; Mr. Hulme, Birmingham; Mr. Hornibrook, Bloomsbury; Messrs. W. H. Smith and Son, London; Mr. Huish, London; Mr. C. Birchall; Mr. Cleary, New York; Mr. Addison, Glasgow; Mr. Johnson, London; Dr. Wallis, Preston; Dr. Wood, Pontefract; Mr. Charlton, Jarrow; Mr. Palmer, Newtown; Mr. Eschwege, London; Dr. Blake, London; Mr. Roger Williams, London; Dr. E. M. Sympson, Lincoln; Messrs. Burroughs and Wellcome, London; Mr. Crow, Canterbury; Messrs. Ridges and Son, London; Dr. McMordie, Belfast; Dr. Farley, Ontario; Dr. G. Herschell, London; Mr. St. George, Lisburn; Secretary, St. Mary's College, Glasgow; St. Bernards, London; M.B.; P. R. G.; Another Anti-Humbug; Secretary, Hartlepool Hospital; Secretary, Devon Hospital; R. R., London; E. J. J., London; Kali, Bath; Dispensing M.D.; C. M., London; T. R. A., London; Secretary, York County Hospital; Alpha, Chancery-lane; Cito, London; Secretary, Queen's College, Birmingham; Vendor, London; Linde British Refrigeration Co., London; S., Fleet-street; A. B., Leeds; Publisher, *Windsor and Eton Gazette*; House Surgeon, Norwich Hospital; Secretary, Bolton Infirmary; *Yorkshire Post*, Leeds; Secretary, West Ham and South Essex Hospital; Secretary, Queen Charlotte's Hospital, W.; An Old Assistant; J. G.; Scrutator; Macgra; Pacific Press Publishing Co., California.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Davies, Wrexham; Mr. Tully, Hastings; Mr. Edwards, Llanelly; Mr. Lloyd, Llanarthney; Dr. Humphreys, Montgomery; Dr. Heaton, Handsworth; Mr. Griffiths, Eastry; Mr. Kershaw, London; Messrs. Sharp and Co., Glasgow; Mr. Freer, Staffs; Mr. Highton; Dr. Adam, West Malling; Mr. Rice, Derby; Mr. Erskine, Oxon.; Mr. Thomas, South Wales; Mr. Irving, Stoke-on-Trent; Messrs. Gibbs, Cuxson, and Co., Wednesbury; Mr. Rowbottom, Alfreton; Dr. Warburton, Sheffield; Mr. Gibbs, Darlington; Dr. Floyd, Birkenhead; Mr. Graham, Scotland; Dr. Forster, Chatham; Dr. Windle, Halifax; Mr. Mead, Whitby; Mr. Simmonds, Newbury; Dr. Barton, Grantham; Mr. Fry, Old Kent-road; Mr. O'Connell, co. Limerick; Mr. Peddie, Staffordshire; Mrs. Kelso, Edinburgh; Mr. Hartley, Staffs; Mrs. Ashdown, Brondesbury; Mr. Pughe, Oldbury; Dr. Stanley, Sheffield; Mr. Potter, Liverpool; Mr. Cropley, Northampton; Mr. Francis, Minneapolis; Mr. Bradshaw, Banbury; Mr. Charlesworth, Hanley; Mr. Williams, Montgomery; Mr. Heywood, Manchester; Messrs. Mottershead and Co., Manchester; Mrs. Millard, Reading; Mr. Codd; Messrs. Tonge and Briggs, Harrow; Mr. Steele, Ealing; Mr. Bryden, Yorks; Mr. Thin, Edinburgh; Dr. Gurney, London; Dr. O'Connor, Bucks; Mr. Yates, Liverpool; Mr. Addis, Cambs; Mr. Lewis, Wingham; G. I.; Zeta; Solicitor, London; P., Camborne; B., London; Surgeon, Rhondda Valley; X. Y. Z., London; Eos, London; W., London; Cavendish College, Cambridge; A. O. F., London; Beta, London; G., Abbot's Bromley; King's, London; X. Q., London; Genuine, London; T. W., Bridgwater; M.O.H., London; B. M. Y., London; Forrester, Blackheath; Harold, London; W. H. G., London; Alpha, Northumberland; Alpha, Somerset; Statim, London; Seaside, London; Alpha, Bradford; Surgeon, London; A. A. A., London; Practice, London; Spes, London; A. B., London; Lex, Portsea; Aorta, Leeds; M.D., London; Worcester, London; Cameron, Staffs; Philos, London; A.B., Anerley; Medicine, Leeds; D. G. W., Southfields; Medicus, Margate; W. W. S., London; Medicus, London; Secretary, Macclesfield General Infirmary; M.R.C.S., London.

NEWSPAPERS.—*Bath Herald, Leeds Mercury, Liverpool Mercury, Globe, Manchester Courier, The Schoolmaster, Commonwealth, Glasgow Evening Citizen, Bristol Mercury, Manchester Examiner, Kilkenny Journal, New York Herald (London), Sunday Times, Sheffield Daily Telegraph, Law Journal, Builder, Liverpool Daily Post, Local Government Chronicle, Broad Arrow, Ross Gazette, Batley Reporter Chemist and Druggist, West Middlesex Standard, Bakers' Record, Surrey Advertiser, Reading Mercury, Metropolitan, Saturday Review, Pall Mall Budget, Weekly Free Press and Aberdeen Herald, Birmingham Gazette, Morning Post, City Press, Life, Hertfordshire Mercury, Queen, Mining Journal, Sheffield Independent, Morning Advertiser, Public Opinion, Essex County Chronicle, Colchester Gazette, Newcastle Leader, Whitehall Review, Scottish Leader, Figaro, Windsor and Eton Express, Irish Times, Court Journal, Northern Whig, St. James's Gazette, Essex Herald, Carlisle Patriot, Western Daily Press, Puck, Bolton Weekly Journal, &c.*, have been received.

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